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Hospitalizations among Active Component Members, US Armed Forces, 2004

This report documents frequencies, rates, and characteristics of hospitalizations of active component members of the US Armed Forces during 2004 as documented by standardized, automated records maintained in the Defense Medical Surveillance System. In addition, the report summarizes hospitalizations of servicemembers in U.S. military and non-military hospitals since 1994 based on the first three digits of first listed (“primary”) discharge diagnoses (International Classification of Diseases, 9th revision, clinical modifications). Records of hospitalizations not documented with automated records (e.g., during deployments, field training exercises, shipboard) are not included.

Frequencies, rates, and trends: During 2004, there were 69,418 reports of hospitalizations of active component servicemembers (Table 1)—approximately one-sixth (15.5%) of the hospitalizations were in non-military facilities. The hospitalization rate (all causes) was 49.2 per 1,000 per year. The rate in 2004 was 7.0% lower than in 2003 and 50% lower than in 1996 (Figure 1).

Hospitalizations, by illness and injury categories: The distribution of hospitalizations by major diagnostic categories were relatively stable for the past 5 years (Table 1). For example, in 2004, more than half of all hospitalizations were attributable to pregnancy-related conditions (including labor and delivery), injuries and poisonings, and mental disorders (Table 1). In addition, in 2000, 2002, and 2004, the same categories of conditions were among the eight leading causes of hospitalizations overall (Table 1).

Of note, in the past five years, hospitalizations of servicemembers decreased in all major categories except injuries and poisonings (change, 2000 to 2004: +1,117 hospitalizations; +11.0%), disorders of skin and subcutaneous tissue (change, 2000 to 2004: +400 hospitalizations; +26.3%), and hematologic disorders (change, 2000 to 2004: +11 hospitalizations; +3.6%) (Table 1). The largest decreases in hospitalizations between 2000 and 2004 were for mental disorders (change, 2000 to 2004: -2,022; -17.8%), infectious

and parasitic diseases (change, 2000 to 2004: -1,521; -57.1%), and musculoskeletal disorders (change, 2000 to 2004: -1,217; -16.1%), (Table 1).

In 2004, the overall hospitalization rate was 3.7 times higher among females than males (crude rates, females: 126.3 per 1,000 per year; males: 34.6 per 1,000 per year). Excluding pregnancy-related hospitalizations, the crude rate among females (50.7 per 1,000 per year) was 1.5 times higher than among males. The largest differences in rates between females and males were for genitourinary disorders (rate difference: 7.22 per 1000 p-yrs; rate ratio: 9.46), mental disorders (rate difference: 4.66 per 1000 p-yrs; female-to-male rate ratio: 1.79), and neoplasms (rate difference: 3.38 per 1000 p-yrs; rate ratio: 5.41) (Figure 3). Hospitalization rates were higher among males than females for injuries and poisonings (rate difference: 3.23 per 1000 p-yrs; male-to-female rate ratio: 1.63), musculoskeletal disorders (rate difference: 0.28 per 1000 p-yrs; male-to-female rate ratio: 1.07), and circulatory disorders (rate difference: 0.36 per 1000 p-yrs; male-to-female rate ratio: 1.31).

Relationships between age and hospitalization rates varied across diagnostic categories (Figure 2). For example, hospitalization rates for neoplasms, circulatory disorders, and musculoskeletal disorders sharply increased with age, while hospitalization rates for infectious and parasitic diseases, mental disorders, respiratory disorders, dermatologic conditions, and injuries and poisonings generally declined with age (Table 2). Hospitalization rates for genitourinary disorders increased with age among females but were relatively stable across age groups among males; otherwise, relationships between age and category-specific hospitalization rates were generally similar among males and females (Figure 2).

Most frequent diagnoses: In 2004, six diagnoses (as specified by 3-digit ICD-9-CM codes) accounted for more than 1,000 hospitalizations each among male servicemembers: adjustment reactions (n=2,320), affective psychoses (n=1,559), intervertebral disc disorders (n=1,541), acute appendicitis (n=1,483), symptoms involving respiratory/other chest symptoms

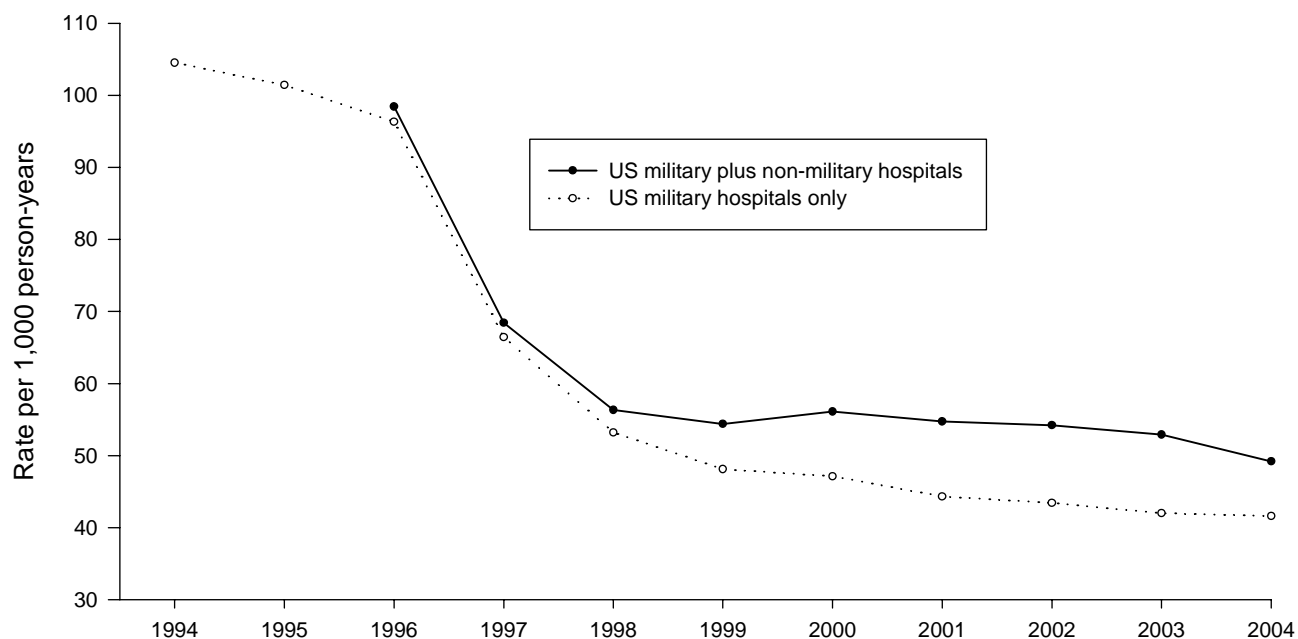
(n=1,395), and other cellulitis and abscess (n=1,193) (Table 2).

Among females, three diagnoses (all related to labor and delivery) accounted for at least 1,000 hospitalizations each: trauma to perineum and vulva during delivery (n=3,895), delivery in a completely normal case (n=1,174), and abnormality of forces of labor (n=1,074) (Table 3). Other than conditions related to pregnancy, leading causes of hospitalizations of females were adjustment reaction (n=754), affective psychoses (n=613), and uterine leiomyoma (n=473) (Table 3).

Duration of hospitalizations: In 2004, median durations of hospitalizations were from 1 to 3 days for all categories of conditions except mental disorders (median duration: 6 days) (Figure 3). However, there was significant variability across diagnostic categories in regard to ranges of durations (Figure 4). For example, at least 5% of hospitalizations for mental disorders, injuries and

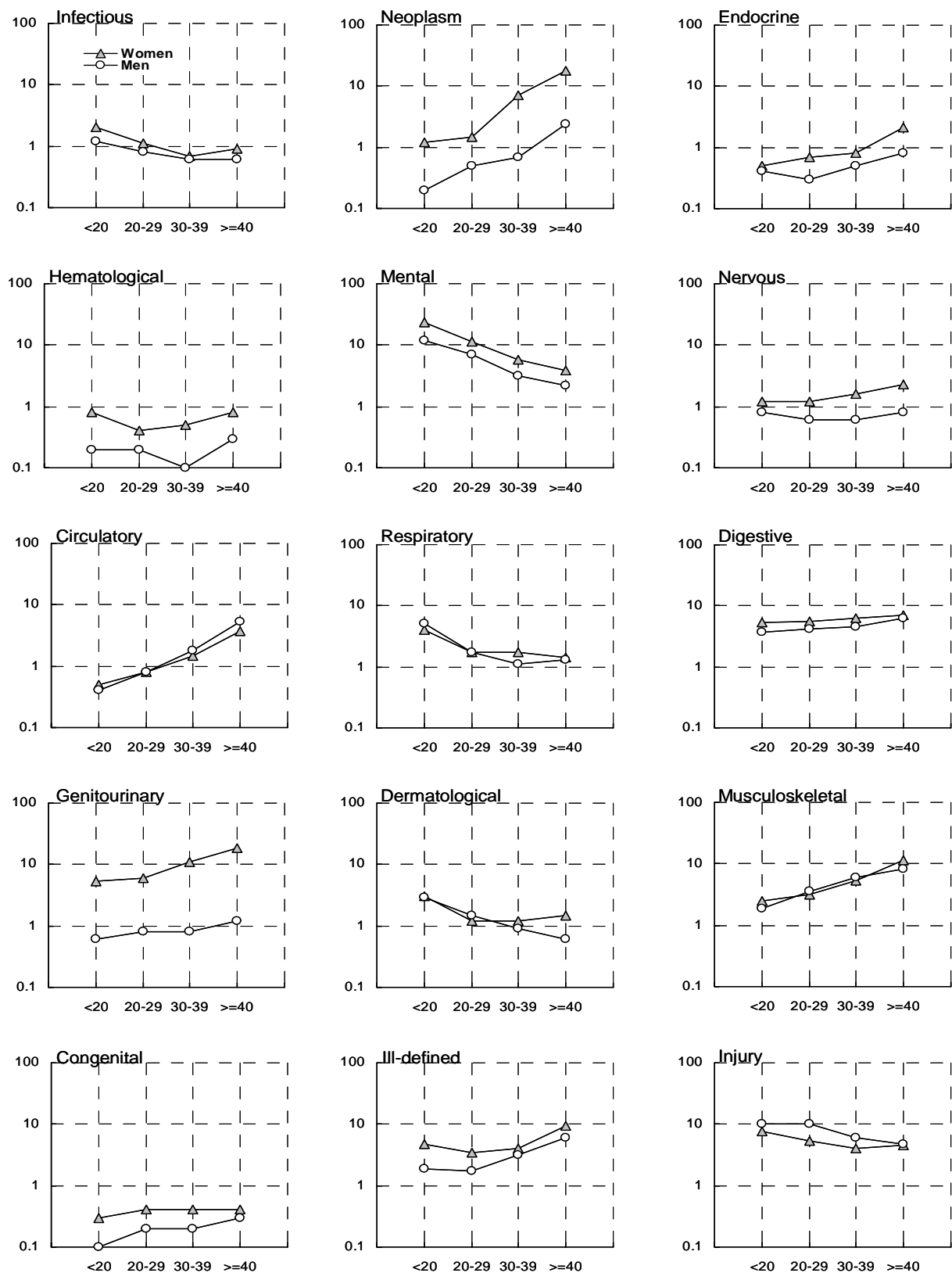
poisonings, and neoplasms were 18 days or longer (Figure 3). Finally, medians and ranges of durations of hospitalizations overall have been fairly stable since 1997 (Figure 4).

Causes, intentions, and activities associated with injuries and poisonings: In 2004, injuries and poisonings accounted for more hospitalizations of U.S. servicemembers than any other category of diagnoses (other than pregnancy-related conditions). Approximately one-sixth (16.5%) of all injuries/poisonings that resulted in hospitalizations were inflicted intentionally (e.g., enemy weapons; suicide gestures/attempts; fights, assaults, legal interventions); and of these, nearly two-thirds (61.0%) were “battle casualties” (Table 4). The most frequently reported causes of unintentional injuries/poisonings were “falls and miscellaneous,” “land transport,” “complications of medical/surgical care,” and “guns, explosives, and related agents” (Table 4).

Figure 1. Rate of hospitalizations by calendar year, US Armed Forces, 1994-2004.**Table 1. Hospitalizations, ICD-9 diagnostic categories, US Armed Forces, 2000, 2002, and 2004**

Major Diagnostic Category (ICD-9-CM)	2000		2002		2004	
	Number	(Rank)	Number	(Rank)	Number	(Rank)
Pregnancy related conditions (630 - 676)	16,741	(1)	17,681	(1)	15,913	(1)
Injury and poisoning (800 - 999)	10,183	(3)	10,269	(3)	11,300	(2)
Mental disorders (290 - 319)	11,331	(2)	10,659	(2)	9,309	(3)
Digestive system (520 - 579)	7,446	(5)	7,666	(4)	6,640	(4)
Musculoskeletal system (710 - 739)	7,577	(4)	6,394	(5)	6,360	(5)
Ill-defined conditions (780 - 799)	4,274	(6)	4,995	(6)	3,983	(6)
Genitourinary system (580 - 629)	3,044	(8)	3,090	(8)	2,722	(7)
Respiratory system (460 - 519)	3,408	(7)	3,169	(7)	2,490	(8)
Circulatory system (390 - 459)	2,173	(10)	2,281	(9)	2,095	(9)
Dermatological diseases (680 - 709)	1,522	(12)	1,785	(11)	1,922	(10)
Neoplasms (140 - 239)	1,868	(11)	1,938	(10)	1,790	(11)
Other (E & V codes)	1,456	(13)	1,634	(12)	1,371	(12)
Infectious and parasitic diseases (001-139)	2,666	(9)	1,422	(13)	1,145	(13)
Nervous system (320 - 389)	1,261	(14)	987	(14)	1,039	(14)
Endocrine, nutrition, immunity (240 - 279)	716	(15)	716	(15)	679	(15)
Congenital anomalies (740 - 759)	347	(16)	309	(17)	340	(16)
Hematologic disorders (280 - 289)	309	(17)	357	(16)	320	(17)

Figure 2. Rate* of hospitalizations, by major diagnostic categories, by age and gender, US Armed Forces, 2004.



* Rates expressed as hospitalizations per 1,000 person-years.

Table 2. Most frequent diagnoses during hospitalization, by major diagnostic category, males, US Armed Forces, 2004

Diagnostic category (ICD-9-CM codes)	No.	%	Diagnostic category (ICD-9-CM codes)	No.	%
Infectious and parasitic diseases (001-139)	923		Digestive system (520 - 579)	5,414	
Meningitis due to enterovirus	204	22.1	Acute appendicitis	1,483	27.4
Viral & chlamydial infection	107	11.6	Dentofacial anomalies, including malocclusion	504	9.3
Intestinal infections due to other organisms	97	10.5	Inguinal hernia	368	6.8
Infectious mononucleosis	56	6.1	Diseases of esophagus	345	6.4
Streptococcal sore throat and scarlatina	53	5.7	Other noninfective gastroenteritis and colitis	297	5.5
Neoplasms (140 - 239)	919		Genitourinary system (580 - 629)	1,025	
Cancer of testis	79	8.6	Calculus of kidney and ureter	363	35.4
Cancer of prostate	78	8.5	Other disorders of male genital organs	138	13.5
Cancer of thyroid gland	65	7.1	Acute renal failure	83	8.1
Cancer of brain	41	4.5	Other disorders of kidney and ureter	65	6.3
Cancer of colon	32	3.5	Urethral stricture	61	6.0
Endocrine, nutrition, immunity (240 - 279)	509		Pregnancy related conditions (630 - 676)	-	
Diabetes mellitus	190	37.3	-	-	-
Disorders of fluid, electrolyte, acid-base balance	154	30.3	-	-	-
Nontoxic nodular goiter	30	5.9	-	-	-
Thyrotoxicosis with or without goiter	24	4.7	-	-	-
Obesity and other hyperalimentation	17	3.3	-	-	-
Hematologic disorders (280 - 289)	221		Dermatological diseases (680 - 709)	1,635	
Diseases of white blood cells	63	28.5	Other cellulitis and abscess	1,193	73.0
Other diseases of blood/blood-forming organs	40	18.1	Pilonidal cyst	132	8.1
Purpura and other hemorrhagic conditions	31	14.0	Cellulitis and abscess of finger and toe	118	7.2
Aplastic anemia	25	11.3	Disorders of skin & subcutaneous tissue	28	1.7
Other and unspecified anemias	20	9.0	Local infections of skin & subcutaneous tissue	24	1.5
Mental disorders (290 - 319)	7,089		Musculoskeletal system (710 - 739)	5,462	
Adjustment reaction	2,320	32.7	Intervertebral disc disorders	1,541	28.2
Affective psychoses	1,559	22.0	Internal derangement of knee	852	15.6
Depressive disorder, nec	583	8.2	Other derangement of joint	672	12.3
Alcohol dependence syndrome	570	8.0	Other disorders of bone and cartilage	389	7.1
Neurotic disorders	540	7.6	Other and unspecified disorders of back	276	5.1
Nervous system (320 - 389)	754		Congenital anomalies (740 - 759)	265	
Migraine	120	15.9	Other congenital musculoskeletal anomalies	52	19.6
Epilepsy	47	6.2	Other congenital anomalies of circulatory system	31	11.7
Other conditions of brain	45	6.0	Congenital anomalies of urinary system	31	11.7
Mononeuritis of upper limb and multiplex	42	5.6	Other congenital anomalies of nervous system	18	6.8
Mononeuritis of lower limb	38	5.0	Anomalies of bulbus cordis, cardiac septal closure	18	6.8
Circulatory system (390 - 459)	1,847		Ill-defined conditions (780 - 799)	3,113	
Cardiac dysrhythmias	344	18.6	Symptoms involving respiratory system & chest	1,395	44.8
Acute myocardial infarction	186	10.1	General symptoms	851	27.3
Other forms of chronic ischemic heart disease	178	9.6	Other symptoms involving abdomen and pelvis	392	12.6
Acute pulmonary heart disease	111	6.0	Symptoms involving head and neck	133	4.3
Other venous embolism and thrombosis	104	5.6	Symptoms involving digestive system	89	2.9
Respiratory system (460 - 519)	2,099		Injury and poisoning (800 - 999)	10,206	
Pneumonia, organism unspecified	693	33.0	Other complications of procedures, nec	638	6.3
Peritonsillar abscess	166	7.9	Fracture of ankle	595	5.8
Pneumothorax	156	7.4	Fracture of tibia and fibula	505	4.9
Asthma	118	5.6	Fracture of face bones	500	4.9
Acute tonsillitis	104	5.0	Fracture of radius and ulna	379	0.0

Table 3. Most frequent diagnoses during hospitalization, by major diagnostic category, females, US Armed Forces, 2004

Diagnostic category (ICD-9-CM codes)	No.	%	Diagnostic category (ICD-9-CM codes)	No.	%
Infectious and parasitic diseases (001-139)	222		Digestive system (520 - 579)	1,226	
Meningitis due to enterovirus	51	23.0	Dentofacial anomalies, including malocclusion	212	17.3
Intestinal infections due to other organisms	38	17.1	Acute appendicitis	190	15.5
Viral & chlamydial infection	34	15.3	Cholelithiasis	134	10.9
Streptococcal sore throat and scarlatina	14	6.3	Other noninfective gastroenteritis and colitis	76	6.2
Ill-defined intestinal infections	9	4.1	Intestinal obstruction without mention of hernia	55	4.5
Neoplasms (140 - 239)	871		Genitourinary system (580 - 629)	1,697	
Uterine leiomyoma	473	54.3	Pain & other symptoms	224	13.2
Benign neoplasm of ovary	59	6.8	Noninflammatory disorder ovary, fallopian tube	211	12.4
Cancer of female breast	34	3.9	Menstrual disorder, other abnormal bleeding	186	11.0
Cancer of thyroid gland	33	3.8	Infections of kidney	167	9.8
Benign neoplasm of breast	20	2.3	Other disorders of breast	165	9.7
Endocrine, nutrition, immunity (240 - 279)	170		Pregnancy related conditions (630 - 676)	15,897	
Disorders of fluid, electrolyte & acid-base balance	38	22.4	Trauma to perineum and vulva during delivery	3,895	24.5
Nontoxic nodular goiter	29	17.1	Delivery in a completely normal case	1,174	7.4
Obesity and other hyperalimentation	28	16.5	Abnormality of forces of labor	1,074	6.8
Thyrotoxicosis with or without goiter	21	12.4	Other current conditions	966	6.1
Diabetes mellitus	13	7.6	Early or threatened labor	905	5.7
Hematologic disorders (280 - 289)	99		Dermatological diseases (680 - 709)	287	
Iron deficiency anemias	27	27.3	Other cellulitis and abscess	143	49.8
Purpura and other hemorrhagic conditions	25	25.3	Other hypertrophic and atrophic conditions of skin	36	12.5
Other and unspecified anemias	17	17.2	Pilonidal cyst	31	10.8
Diseases of white blood cells	12	12.1	Other disorders of skin and subcutaneous tissue	30	10.5
Hereditary hemolytic anemias	5	5.1	Cellulitis and abscess of finger and toe	10	3.5
Mental disorders (290 - 319)	2,220		Musculoskeletal system (710 - 739)	898	
Adjustment reaction	754	34.0	Intervertebral disc disorders	202	22.5
Affective psychoses	613	27.6	Internal derangement of knee	116	12.9
Depressive disorder, nec	198	8.9	Other derangement of joint	99	11.0
Neurotic disorders	190	8.6	Other disorders of bone and cartilage	86	9.6
Alcohol dependence syndrome	103	4.6	Other and unspecified disorders of back	50	5.6
Nervous system (320 - 389)	285		Congenital anomalies (740 - 759)	75	
Migraine	107	37.5	Other congenital anomalies of limbs	12	16.0
Other/unspecified disorders	20	7.0	Other congenital anomalies of digestive system	10	13.3
Epilepsy	17	6.0	Other congenital musculoskeletal anomalies	10	13.3
Other conditions of brain	17	6.0	Anomalies of bulbus cordis/cardiac septal closure	7	9.3
Multiple sclerosis	14	4.9	Other congenital anomalies of nervous system	5	6.7
Circulatory system (390 - 459)	248		Ill-defined conditions (780 - 799)	870	
Cardiac dysrhythmias	38	15.3	Other symptoms involving abdomen and pelvis	264	30.3
Acute pulmonary heart disease	34	13.7	Symptoms involving respiratory system & chest	217	24.9
Hemorrhoids	27	10.9	General symptoms	208	23.9
Other venous embolism and thrombosis	26	10.5	Symptoms involving digestive system	56	6.4
Essential hypertension	16	6.5	Symptoms involving head and neck	48	5.5
Respiratory system (460 - 519)	391		Injury and poisoning (800 - 999)	1,094	
Pneumonia, organism unspecified	83	21.2	Other complications of procedures, nec	142	13.0
Asthma	66	16.9	By analgesics, antipyretics and antirheumatics	81	7.4
Chronic disease of tonsils and adenoids	27	6.9	Fracture of ankle	80	7.3
Peritonsillar abscess	26	6.6	Complications peculiar to specified procedures	59	5.4
Acute tonsillitis	24	6.1	Sprains and strains of knee and leg	38	3.5

Figure 3. Length of hospital stay, by major diagnostic category, US Armed Forces, 2004.

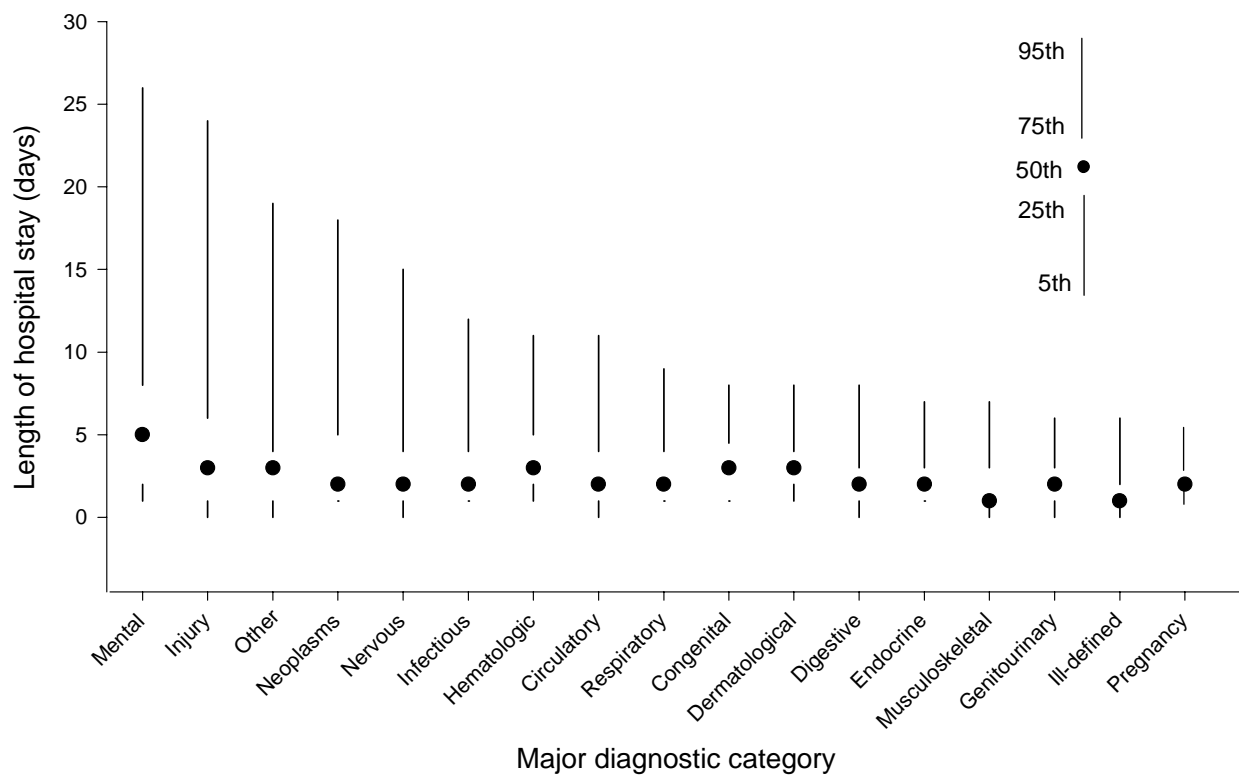
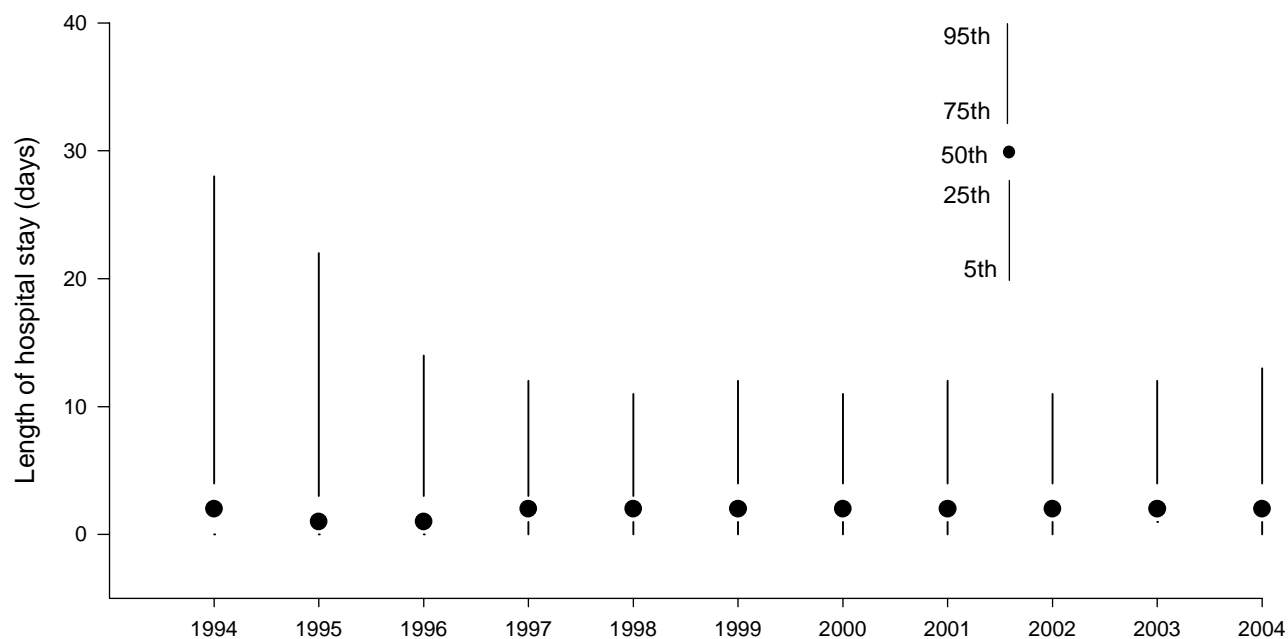


Figure 4. Length of hospital stay, by year, US Armed Forces, 1994-2004.

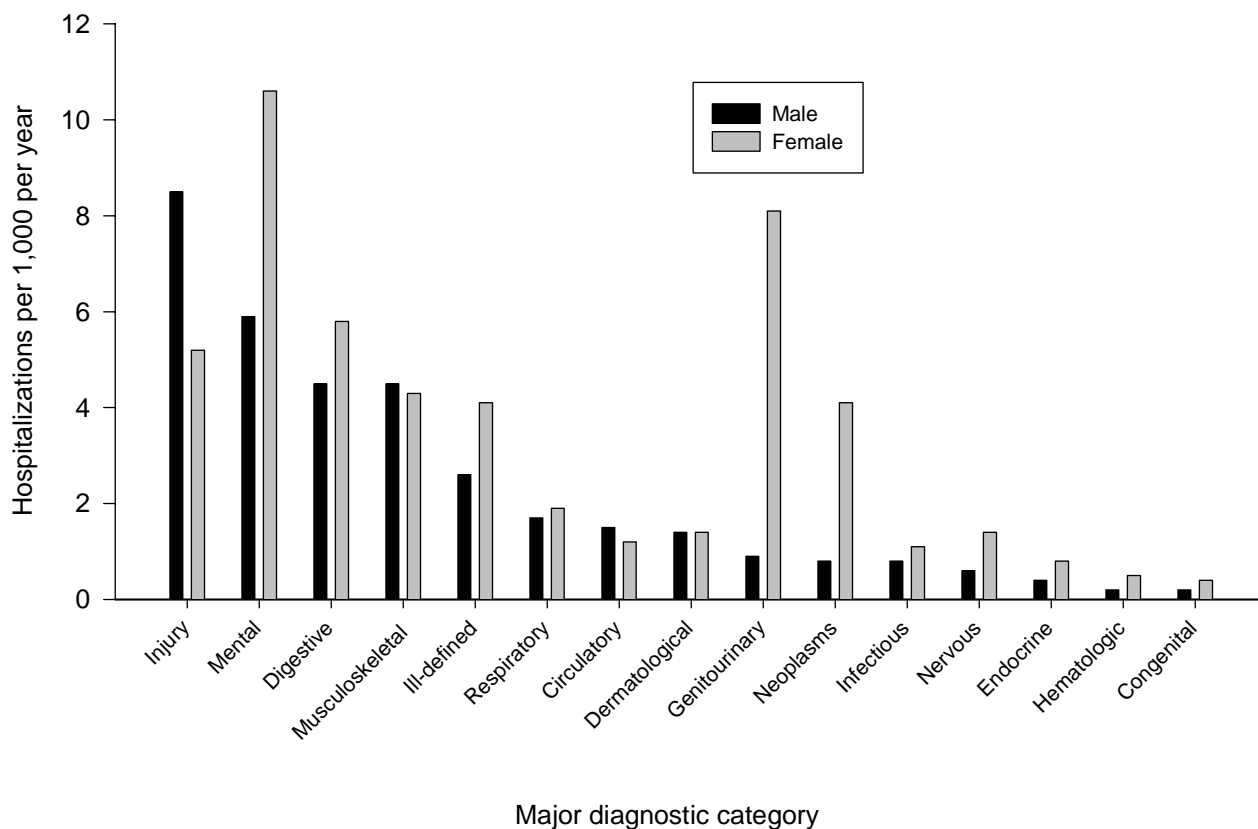


**Table 4. Injury hospitalizations by causal agent,*
US Armed Forces, 2004**

Cause	Number	Percent
Unintentional		
Falls and miscellaneous	1,988	17.6
Land transport	1,363	12.1
Complications of medical/surgical	1,311	11.6
Guns, explosives (includes accidents during war)	1,043	9.2
Athletics	733	6.5
Poisons and fire	360	3.2
Machinery, tools	359	3.2
Environmental	267	2.4
Air transport	263	2.3
Water transport	33	0.3
Intentional		
Battle casualty	1,138	10.1
Self-inflicted	314	2.8
Non-battle, inflicted by other (e.g., assault)	414	3.7
Missing/invalid code	1,714	15.2

* Causal agents were determined by general class of trauma and specific causative agent codes, NATO Standardization Agreement (STANAG) 2050.

Figure 5. Hospitalizations (excluding pregnancy-related) per 1,000 per year by major diagnostic categories, by gender, active component, US Armed Forces, 2004.



Ambulatory Visits among Members of Active Components, US Armed Forces, 2004

This report documents frequencies, rates, and characteristics of ambulatory visits of active component members of the US Armed Forces during 2004 (as documented by routine, standardized, automated reports of the Military Health System). For the report, ambulatory visits were categorized based on the first three digits of first listed (“primary”) diagnosis codes (International Classification of Diseases, 9th revision, clinical modifications) on records of ambulatory visits of U.S. servicemembers. Records of ambulatory visits not documented with automated records (e.g., during deployments, field training exercises, shipboard) are not included. All data for the report were acquired from the Defense Medical Surveillance System

Frequencies, rates, and trends. During 2004, there were 12,370,882 reports of ambulatory visits of active component servicemembers (Table 1). The crude rate (all causes) was 8,767.0 visits per 1,000 persons per year. The ambulatory visit rate in 2004 was 4.9% higher than in 2003 (Figure 1).

Distribution of visits, by diagnostic categories. For the past 5 years, the distribution of ambulatory visits in relation to major diagnostic categories has been stable (Table 1). In 2004, nearly half (46.3%) of all visits were for “other contact with health services.” This category (indicated by “V” codes of the ICD-9-CM) includes health care not related to current illnesses or injuries (e.g., routine and pre-deployment immunizations, management of normal pregnancies, routine physical examinations, health promotion counseling, pre- and post-deployment screening). Of note, between 2000 and 2004, reported visits for this category increased by 40.6% (change, 2000 to 2004: +1,654,478 visits).

Among ambulatory visits for current illnesses or injuries, the most frequent in 2004 were for musculoskeletal disorders (23.2%), injuries/poisonings (12.4%), and signs, symptoms, and ill-defined conditions (11.1%) (Table 1). Between 2000 and 2004, the largest increases in reported visits for current illnesses or injuries were for mental disorders (change, 2000 to 2004: +100,315 visits) and signs,

symptoms, and ill-defined conditions (change, 2000 to 2004: +98,965 visits). The largest decreases during the same period were for injuries and poisonings (change, 2000 to 2004: -155,460 visits) and musculoskeletal disorders (change, 2000 to 2004: -84,833 visits) (Table 1).

Of all 3-digit level illness and injury-related diagnoses, the most frequently reported among males were other/unspecified disorders of joints (n=295,601), disorders of refraction and accommodation (n=279,226), other/unspecified disorders of the back (n=241,815), and acute upper respiratory infections of multiple/unspecified sites (n=191,305) (Table 2).

Among females, the most frequently reported 3-digit level diagnoses were other/unspecified disorders of joints (n=90,258), other/unspecified disorders of the back (n=74,365), disorders of refraction and accommodation (n=72,858), acute upper respiratory infection of multiple/unspecified sites (n=60,841), and adjustment reactions (n=39,322) (Table 3).

Approximately three-fourths (73.4%) of all ambulatory visits for illnesses and injuries were among males. However, the crude rate among females (crude rate, all illnesses and injuries: 8,297.3 per 1,000 p-yrs) was approximately twice as high as among males (crude rate, all illnesses and injuries: 4,084.1 per 1,000 p-yrs), and rates were higher among females than males in every major diagnostic category (Figure 2).

For most major categories, relationships between age and ambulatory visit rates were similar among males and females (Figure 2). For example, among both males and females, ambulatory visit rates of infectious and parasitic diseases, respiratory disorders, and injuries declined with age, while rates of neoplasms; endocrine, metabolic, and nutritional disorders; and circulatory disorders sharply increased with age (Figure 2). Of note, rates of genitourinary disorders were approximately 10-times higher among females than males overall; however, rates slightly declined with age among females but steadily increased with age among males (Figure 2).

Finally, servicemembers were returned to duty without limitations after 83.5% of ambulatory visits for current illnesses and injuries (e.g., excluding medical examinations, immunizations, counseling). However, approximately one of every eight (12.2%) illness and injury-related visits resulted in limited duty dispositions; and approximately one of every 30 (3.3%) visits resulted in convalescence in “quarters” dispositions (Figure 3).

Approximately one-fourth of all visits for injuries and poisonings (24.7%) and musculoskeletal disorders (23.7%) resulted in limited duty dispositions (Figure 3). Visits for gastrointestinal disorders (13.5%) and infectious and parasitic diseases (10.6%) were the most likely to result in quarters dispositions. Finally, the most quarters dispositions by far were related to respiratory disorders (n=57,792) (Figure 3).

Table 1. Ambulatory visits, ICD-9 diagnostic categories, US Armed Forces, 2000, 2002, and 2004.

Major Diagnostic Category (ICD-9-CM)	2000 Number (Rank)	2002 Number (Rank)	2004 Number (Rank)
Other (V and E codes)	4,067,962 (1)	4,311,169 (1)	5,722,440 (1)
Musculoskeletal system (710 - 739)	1,624,132 (2)	1,619,864 (2)	1,539,299 (2)
Injury and poisoning (800 - 999)	977,469 (3)	988,343 (3)	822,009 (3)
Ill-defined conditions (780 - 799)	636,769 (5)	786,081 (4)	735,734 (4)
Nervous system (320 - 389)	632,920 (6)	693,679 (6)	705,795 (5)
Respiratory system (460 - 519)	733,483 (4)	709,992 (5)	686,684 (6)
Mental disorders (290 - 319)	525,953 (7)	594,101 (7)	626,268 (7)
Dermatological diseases (680 - 709)	293,793 (9)	306,873 (9)	335,597 (8)
Infectious and parasitic diseases (001-139)	313,635 (8)	308,401 (8)	277,932 (9)
Digestive system (520 - 579)	225,617 (11)	225,605 (11)	234,088 (10)
Genitourinary system (580 - 629)	233,667 (10)	238,695 (10)	232,774 (11)
Circulatory system (390 - 459)	130,511 (12)	128,148 (12)	135,160 (12)
Endocrine, nutrition, immunity (240 - 279)	125,574 (13)	126,975 (13)	115,736 (13)
Pregnancy complications (630 - 679)	58,248 (15)	75,567 (15)	84,681 (14)
Neoplasms (140 - 239)	83,946 (14)	85,074 (14)	79,844 (15)
Congenital anomalies (740 - 759)	18,781 (16)	23,310 (16)	21,154 (16)
Hematologic disorders (280 - 289)	15,149 (17)	15,767 (17)	15,687 (17)

Figure 1. Rate of ambulatory visits by calendar year, US Armed Forces, 1998-2004.

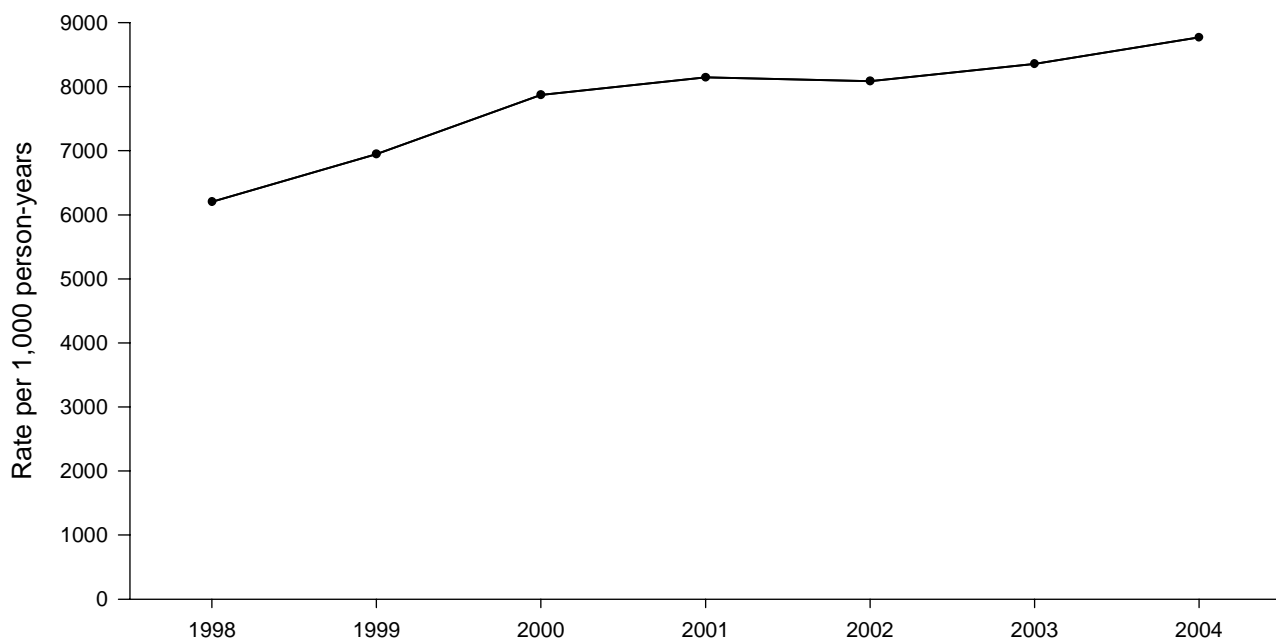
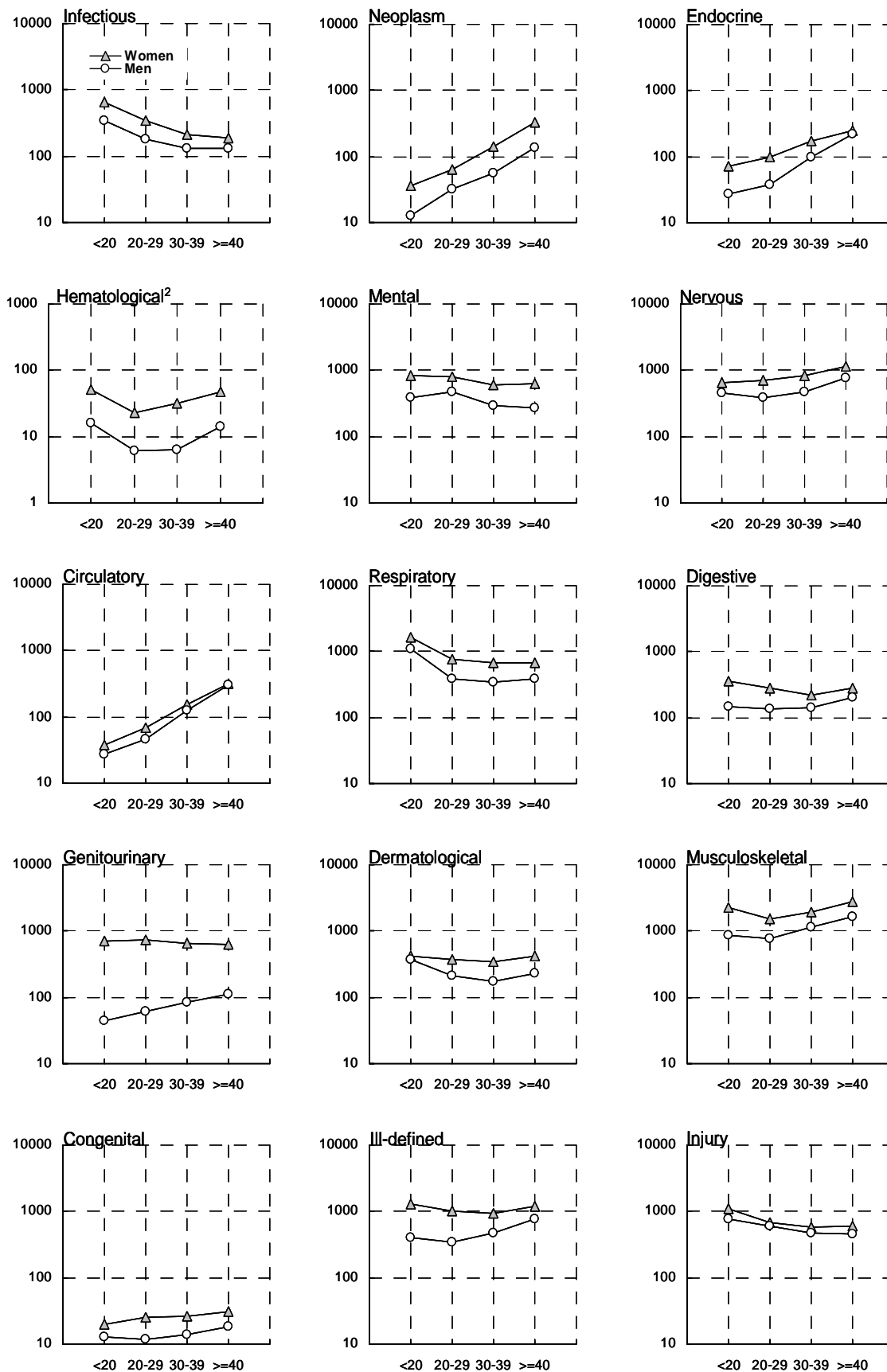


Figure 2. Rate¹ of ambulatory visits, by major diagnostic category, by age and gender, US Armed Forces, 2004.



¹ Rates expressed as ambulatory visits per 1,000 person-years.

² Hematological graph scaling differs from others.

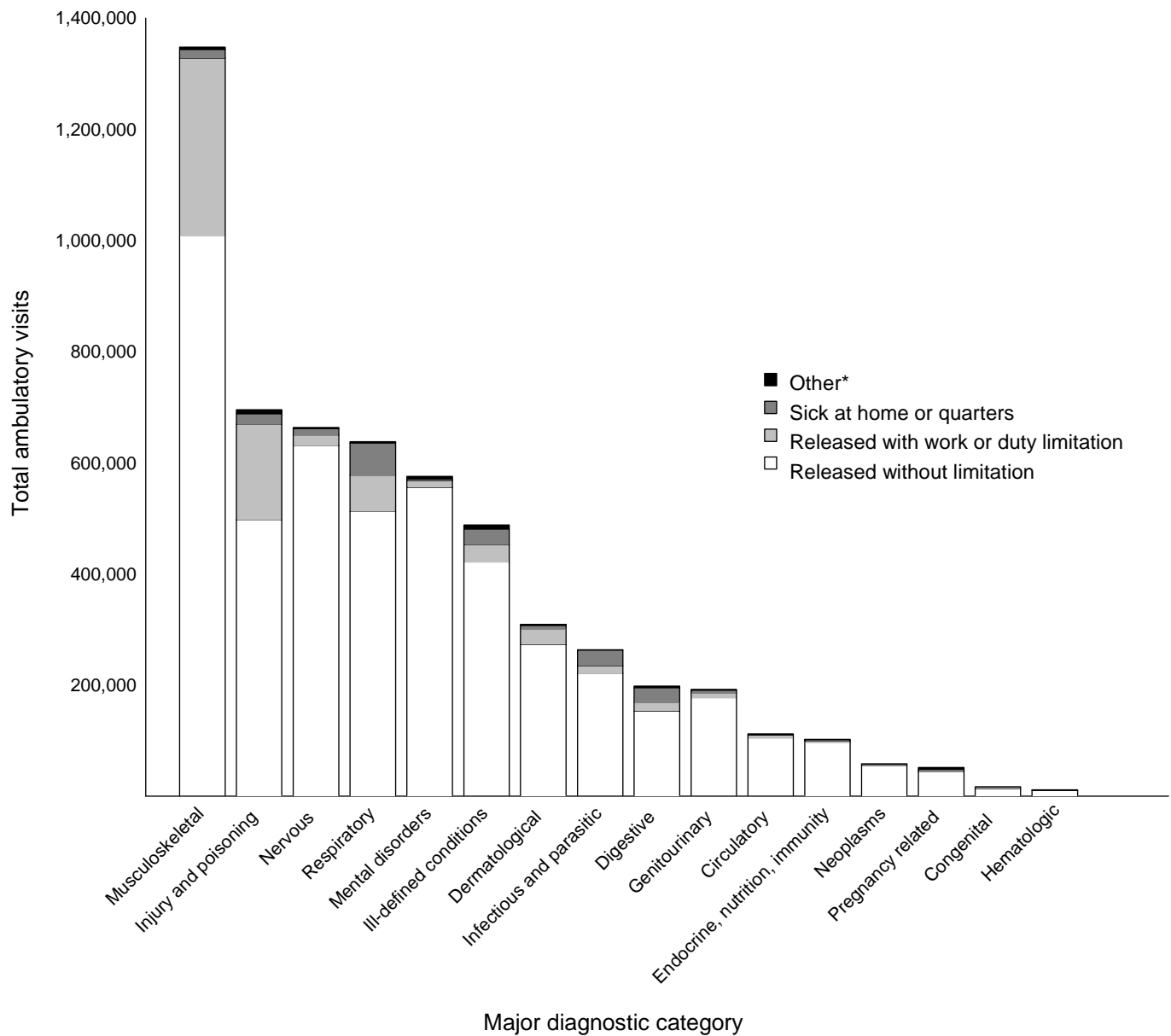
Table 2. Most frequent diagnoses during ambulatory visits by major diagnostic category, males, US Armed Forces, 2004

Diagnostic category (ICD-9-CM codes)	No.	%	Diagnostic category (ICD-9-CM codes)	No.	%
Infectious and parasitic diseases (001-139)	209,319		Digestive system (520 - 579)	176,476	
Viral & chlamydial infection	51,285	24.5	Other noninfective gastroenteritis & colitis	50,328	28.5
Diseases due to viruses & chlamydiae	40,642	19.4	Diseases of esophagus	28,845	16.3
Dermatophytosis	29,187	13.9	Inguinal hernia	13,483	7.6
Intestinal infections due to other organisms	13,586	6.5	Gastritis and duodenitis	10,062	5.7
Streptococcal sore throat and scarlatina	9,508	4.5	Functional digestive disorders, nec	7,840	4.4
Neoplasms (140 - 239)	58,351		Genitourinary system (580 - 629)	85,310	
Benign neoplasm of skin	12,956	22.2	Other disorders of male genital organs	13,388	15.7
Lipoma	7,967	13.7	Calculus of kidney and ureter	12,809	15.0
Neoplasm of uncertain behavior	5,829	10.0	Other disorders of urethra and urinary tract	11,485	13.5
Neoplasm of unspecified nature	2,783	4.8	Orchitis and epididymitis	9,756	11.4
Benign neoplasm of digestive system	2,511	4.3	Infertility, male	5,846	6.9
Endocrine, nutrition, immunity (240 - 279)	88,923		Pregnancy related conditions (630 - 676)	-	
Disorders of lipid metabolism	33,217	37.4	-	-	-
Diabetes mellitus	15,656	17.6	-	-	-
Obesity and other hyperalimentation	15,185	17.1	-	-	-
Disorders of fluid, electrolyte, acid-base balance	5,845	6.6	-	-	-
Gout	5,224	5.9	-	-	-
Hematologic disorders (280 - 289)	9,487		Dermatological diseases (680 - 709)	256,990	
Hereditary hemolytic anemias	2,127	22.4	Other cellulitis and abscess	44,561	17.3
Other and unspecified anemias	1,765	18.6	Contact dermatitis and other eczema	41,509	16.2
Other diseases of blood/blood-forming organs	1,630	17.2	Diseases of sebaceous glands	33,691	13.1
Diseases of white blood cells	1,074	11.3	Diseases of hair and hair follicles	29,342	11.4
Iron deficiency anemias	821	8.7	Diseases of nails	16,654	6.5
Mental disorders (290 - 319)	471,630		Musculoskeletal system (710 - 739)	1,166,704	
Alcohol dependence syndrome	106,368	22.6	Other and unspecified disorders of joints	295,601	25.3
Nondependent abuse of drugs	90,820	19.3	Other and unspecified disorders of back	241,815	20.7
Adjustment reaction	87,528	18.6	Peripheral enthesopathies and allied syndromes	99,038	8.5
Neurotic disorders	48,008	10.2	Other disorders of soft tissues	85,261	7.3
Affective psychoses	41,060	8.7	Nonallopathic lesions, nec	76,402	6.5
Nervous system (320 - 389)	543,325		Congenital anomalies (740 - 759)	15,831	
Disorders of refraction and accommodation	279,226	51.4	Certain congenital musculoskeletal deformities	4,909	31.0
Disorders of conjunctiva	35,020	6.4	Other congenital musculoskeletal anomalies	2,774	17.5
Hearing loss	32,083	5.9	Other congenital anomalies of limbs	1,782	11.3
Migraine	18,636	3.4	Congenital anomalies of the integument	1,596	10.1
Disorders of external ear	16,011	2.9	Congenital anomalies of genital organs	759	4.8
Circulatory system (390 - 459)	112,710		Ill-defined conditions (780 - 799)	516,627	
Essential hypertension	54,235	48.1	Other ill-defined causes of morbidity & mortality	105,718	20.5
Hemorrhoids	12,921	11.5	Symptoms involving respiratory system	93,470	18.1
Cardiac dysrhythmias	10,068	8.9	General symptoms	88,220	17.1
Diseases of capillaries	5,522	4.9	Other symptoms involving abdomen and pelvis	49,324	9.5
Varicose veins of other sites	3,600	3.2	Symptoms involving head and neck	42,000	8.1
Respiratory system (460 - 519)	514,184		Injury and poisoning (800 - 999)	678,421	
Acute upper respiratory infection	191,305	37.2	Sprains/strains of ankle and foot	77,083	11.4
Allergic rhinitis	67,513	13.1	Sprains/strains of knee and leg	63,501	9.4
Acute pharyngitis	54,090	10.5	Sprains/strains of unspecified parts of back	58,422	8.6
Acute sinusitis	30,457	5.9	Injury, other and unspecified	34,041	5.0
Acute bronchitis and bronchiolitis	28,131	5.5	Sprains and strains of shoulder and upper arm	31,742	4.7

Table 3. Most frequent diagnoses during ambulatory visits by major diagnostic category, females, US Armed Forces, 2004

Diagnostic category (ICD-9-CM codes)	No.	%	Diagnostic category (ICM-9-CM codes)	No.	%
Infectious and parasitic diseases (001-139)	68,613		Digestive system (520 - 579)	57,612	
Viral & chlamydial infection	19,640	28.6	Other noninfective gastroenteritis and colitis	20,524	35.6
Other diseases due to viruses and chlamydiae	8,539	12.4	Functional digestive disorders, nec	7,518	13.0
Candidiasis	8,296	12.1	Diseases of esophagus	6,463	11.2
Dermatophytosis	5,706	8.3	Gastritis and duodenitis	4,125	7.2
Intestinal infections due to other organisms	4,810	7.0	Dentofacial anomalies, including malocclusion	1,971	3.4
Neoplasms (140 - 239)	21,493		Genitourinary system (580 - 629)	147,464	
Benign neoplasm of skin	4,234	19.7	Other disorders of urethra and urinary tract	22,173	15.0
Uterine leiomyoma	3,133	14.6	Noninflammatory disorders of cervix	21,415	14.5
Cancer of female breast	2,761	12.8	Inflammatory disease of cervix, vagina, vulva	19,232	13.0
Neoplasm of uncertain behavior	1,623	7.6	Menstrual disorder, other abnormal bleeding	17,488	11.9
Lipoma	1,017	4.7	Pain & other symptoms with female genital organs	17,405	11.8
Endocrine, nutrition, immunity (240 - 279)	26,813		Pregnancy related conditions (630 - 676)	84,499	
Obesity and other hyperalimentation	7,120	26.6	Other current conditions complicating pregnancy	10,757	12.7
Acquired hypothyroidism	4,008	14.9	Early or threatened labor	9,999	11.8
Disorders of lipid metabolism	2,935	10.9	Other complications of pregnancy, nec	8,220	9.7
Disorders of fluid, electrolyte, acid-base balance	2,740	10.2	Hemorrhage in early pregnancy	6,778	8.0
Diabetes mellitus	1,961	7.3	Hypertension complicating pregnancy	4,156	4.9
Hematologic disorders (280 - 289)	6,200		Dermatological diseases (680 - 709)	78,607	
Other and unspecified anemias	1,874	30.2	Diseases of sebaceous glands	15,055	19.2
Iron deficiency anemias	1,665	26.9	Contact dermatitis and other eczema	13,550	17.2
Other diseases of blood/blood-forming organs	576	9.3	Other cellulitis and abscess	8,105	10.3
Hereditary hemolytic anemias	535	8.6	Other disorders of skin & subcutaneous tissue	7,005	8.9
Other deficiency anemias	524	8.5	Diseases of hair and hair follicles	5,858	7.5
Mental disorders (290 - 319)	154,638		Musculoskeletal system (710 - 739)	372,595	
Adjustment reaction	39,322	25.4	Other and unspecified disorders of joints	90,258	24.2
Affective psychoses	27,329	17.7	Other and unspecified disorders of back	74,365	20.0
Neurotic disorders	22,276	14.4	Other disorders of soft tissues	32,134	8.6
Depressive disorder, nec	20,172	13.0	Nonallopathic lesions, nec	30,505	8.2
Alcohol dependence syndrome	11,881	7.7	Peripheral enthesopathies and allied syndromes	26,299	7.1
Nervous system (320 - 389)	162,470		Congenital anomalies (740 - 759)	5,323	
Disorders of refraction and accommodation	72,858	44.8	Certain congenital musculoskeletal deformities	1,323	24.9
Migraine	21,441	13.2	Congenital anomalies of the integument	1,110	20.9
Disorders of conjunctiva	10,497	6.5	Other congenital anomalies of limbs	719	13.5
Mononeuritis of upper limb & multiplex	6,029	3.7	Other congenital musculoskeletal anomalies	636	11.9
Hearing loss	4,805	3.0	Congenital anomalies of urinary system	232	4.4
Circulatory system (390 - 459)	22,450		Ill-defined conditions (780 - 799)	219,107	
Essential hypertension	7,638	34.0	Other ill-defined & unknown morbidity & mortality	38,746	17.7
Hemorrhoids	3,228	14.4	Other symptoms involving abdomen and pelvis	37,196	17.0
Diseases of capillaries	2,617	11.7	Symptoms involving respiratory system	27,425	12.5
Cardiac dysrhythmias	2,261	10.1	General symptoms	23,723	10.8
Varicose veins of lower extremities	1,289	5.7	Symptoms involving head and neck	21,953	10.0
Respiratory system (460 - 519)	172,500		Injury and poisoning (800 - 999)	143,588	
Acute upper respiratory infection multiple sites	60,841	35.3	Sprains/strains of ankle and foot	17,366	12.1
Allergic rhinitis	26,890	15.6	Sprains/strains of other and unspecified of back	17,268	12.0
Acute pharyngitis	18,887	10.9	Sprains/strains of knee and leg	15,148	10.5
Acute sinusitis	13,350	7.7	Certain adverse effects, nec	7,404	5.2
Asthma	11,808	6.8	Other and ill-defined sprains and strains	6,911	4.8

Figure 3. Dispositions after ambulatory visits, by major categories, US Armed Forces, 2004.



*Other includes immediate referral, left without being seen, left against medical advice, admitted, and expired.

Estimates of Absolute and Relative Health Care Burdens Attributable to Various Illnesses and Injuries, US Armed Forces, 2004

Priorities and resources for health promotion and prevention activities inevitably depend on perceptions of the relative importance of various illnesses and injuries. This report is the fifth in a series of *MSMR* articles¹⁻⁴ that estimate health care burdens attributable to various illnesses and injuries among members of the US Armed Forces.

Several classification systems/measures have been developed to quantify the public health burdens that are attributable to various illnesses and injuries in defined populations and settings. Not surprisingly, different classification systems/measures lead to different rankings of illness and injury-specific burdens. For example, in a given population and setting, the illnesses and injuries that account for the most hospitalizations may differ from those that account for the most outpatient encounters; and the illnesses and injuries that account for the most medical encounters overall may differ from those that affect the most individuals or cause the most significant or long-lasting disabilities. Thus, in a given population and setting, the classification system or measure that is used to quantify illness and injury-specific morbidity burdens determines, to some extent, conclusions regarding the relative importance of various conditions.

Methods: For this report (as for previous *MSMR* reports regarding the same subject), illnesses and injuries were defined by grouping related ICD-9-CM coded diagnoses (at the 3-digit level) based on the classification system developed for the Global Burden of Disease Study.⁵ In general, the system groups diagnoses that have common pathophysiologic or etiologic bases and/or significant international health policymaking importance. To estimate the health care burdens attributable to various illnesses and injuries, we summarized the inpatient and outpatient experiences of all active component servicemembers during 2004 to estimate the total numbers of medical encounters attributable to and servicemembers affected by each illness and injury. In addition, we quantified the total hospital bed-days associated with each illness and injury as an indicator of the relative severities and health care costs attributable to them.

Medical encounters, overall: During 2004, all other signs and symptoms, injuries of the back/abdomen, and upper respiratory infections were the leading sources of medical encounters among active duty servicemembers (Table 1). All other musculoskeletal disorders, disorders of refraction/accommodation, and knee injuries were the next leading sources of medical encounters (Table 1). Approximately half (49.5%) of all medical encounters during the year were attributable to the ten illnesses and injuries that accounted for the most encounters (Table 1). In relation to broad categories, injuries and poisonings, signs and symptoms, and mental disorders accounted for nearly half (48.2%) of all medical encounters.

Individuals affected: During 2004, more servicemembers received medical care for upper respiratory infections than any other condition (Table 1). Disorders of refraction/accommodation, all other signs and symptoms, injuries of the back/abdomen, and all other musculoskeletal diseases affected the next highest numbers of servicemembers (Table 1). In relation to broad categories, injuries and poisonings, diseases of sense organs (e.g., vision and hearing abnormalities), signs and symptoms, and respiratory infections affected the highest numbers of servicemembers.

Hospital bed-days: During 2004, deliveries of newborn infants and complications of pregnancy accounted for the first and fourth most hospital bed-days, respectively (Table 1). Mood disorders, adjustment disorders, injuries of the head and neck, and leg injuries accounted for the second, fifth, third, and sixth most hospital bed-days, respectively (Table 1). During the year, more than half (53.5%) of all hospital bed-days were attributable to the ten conditions that accounted for the most bed-days. In relation to broad categories, injuries and poisonings, mental disorders, and maternal conditions together accounted for approximately two-thirds (67.1%) of the total hospital bed-days of active component servicemembers.

Relationships between health care burden indicators:

There was a strong correlation between the number of individuals affected by a condition and the number of medical encounters attributable to the condition (linear regression, total medical encounters = $1.8 \times$ individuals affected, $R^2=0.91$). In contrast, the number of hospital bed-days attributable to a condition was not strongly correlated with either the number of individuals affected by ($R^2=0.07$) or the number of medical encounters attributable to ($R^2=0.14$) the condition. Thus, in the US military, relatively unique insights into morbidity burdens may be gained by assessing (1) hospital bed-days attributable to particular conditions; and (2) either the number of individuals affected by or the total medical encounters attributable to specific conditions.

Editorial comment: Illnesses and injuries are “burdens” to the US Armed Forces to the extent that they degrade the health, fitness, and operational capabilities of servicemembers and consume resources for diagnosis, treatment, rehabilitation, and disability compensation. To some extent, prevention priorities (and associated resources) should target illnesses and injuries that account for the largest morbidity burdens.

As in recent years, the summaries presented here document that estimates of health care burdens attributable to various illnesses and injuries among US servicemembers vary based on the criteria used for grouping diagnoses and the methods used for quantifying burdens. The results also document that relatively few illnesses and injuries account for most of the total health care burden, regardless of how it is measured.

In 2004, injuries and poisonings affected more servicemembers and caused more medical encounters and hospital bed-days than any other category of conditions. Clearly, primary, secondary, and tertiary prevention of injuries should be a high priority of military health promotion and disease prevention efforts.

Mental disorders and maternal conditions accounted for approximately 40% of all hospital bed days but only 11% of all medical encounters. These conditions affect relatively few servicemembers but have significant health care burdens.

Finally, upper respiratory infections affected more servicemembers than any other specific condition; but they accounted for very few hospital

bed-days. Hence, their impacts on military operational effectiveness (not specifically measured here) were likely relatively greater than the direct costs to the military health system that were attributable to them.

During calendar year 2004, the ten conditions that accounted for the most medical encounters accounted for half of all medical encounters, and the ten conditions that accounted for the most hospital bed-days accounted for more than half of all hospital bed-days.

Only injuries of the back/abdomen, injuries of the arm/shoulder, and substance abuse disorders were among the ten leading causes of both medical encounters and hospital bed-days. However, there were 12 conditions among the top 25 in all three health care burden-related rankings. Of these, 7 were injuries (to the back/abdomen; knee; foot/ankle; arm/shoulder; unspecified; head/neck; and hand/wrist); one was a mental disorder (i.e., adjustment disorders); and the others were non-specific groups of diagnoses: “all other” signs and symptoms, musculoskeletal disorders, skin diseases, and digestive diseases.

In summary, this analysis, like those of the past several years, documents that relative rankings of health care burdens among active duty servicemembers vary significantly depending on the metrics used to measure burdens. This summary also documents that, regardless of the methods used to quantify burdens, relatively few illnesses and injuries account for most of the total health care burden among US servicemembers regardless of how it is measured. Illnesses and injuries that account for disproportionately large health care burdens (regardless of the metric used to measure it) should be assessed to determine their susceptibilities to primary, secondary, and tertiary prevention efforts and given high priorities for prevention resources.

Data analysis and report by Anna Soloviov, Analysis Group, Army Medical Surveillance Activity.

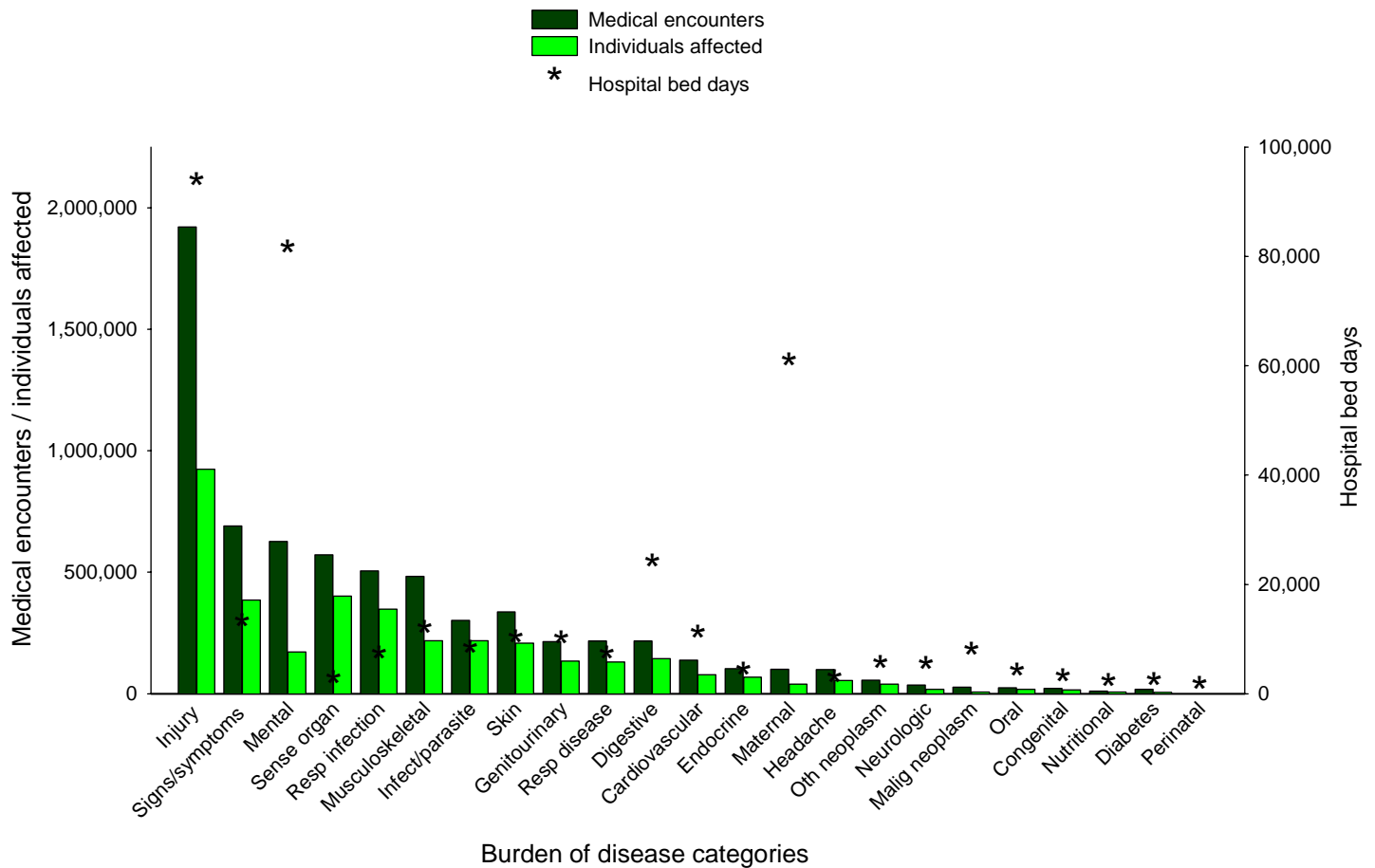
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Figure 1. Medical encounters, individuals affected, and hospital bed days, by burden of disease categories, US Armed Forces, 2004.



**Table 1. Health care burdens attributable to various diseases and injuries,
US Armed Forces, 2004**

Category ¹	Medical encounters ¹		Individuals affected ²		Hospital bed days	
	No.	Rank	No.	Rank	No.	Rank
Injury and poisoning						
Back and abdomen	404,876	(2)	163,870	(4)	13,197	(7)
Knee	325,963	(6)	129,867	(10)	4,821	(21)
Foot and ankle	294,275	(7)	144,849	(6)	7,363	(14)
Arm and shoulder	244,224	(8)	95,232	(12)	10,244	(10)
Unspecified injury	212,540	(11)	142,381	(7)	6,057	(16)
Head and neck	146,859	(14)	77,488	(13)	18,748	(3)
Hand and wrist	131,333	(16)	71,928	(15)	4,737	(22)
Leg	80,867	(24)	38,412	(27)	14,075	(6)
Environmental	29,184	(44)	23,476	(40)	1,095	(49)
Other injury from external causes	17,464	(58)	13,138	(54)	312	(77)
Other complications NOS	13,466	(64)	8,495	(60)	7,965	(13)
All other injury	12,054	(67)	8,470	(61)	700	(57)
Poisoning, nondrug	3,988	(81)	3,222	(77)	335	(75)
Poisoning, drugs	3,921	(83)	2,683	(79)	2,597	(31)
Signs and symptoms						
All other signs and symptoms	480,319	(1)	256,515	(3)	5,482	(19)
Respiratory and chest	122,510	(17)	73,868	(14)	3,941	(27)
Abdomen and pelvis	87,182	(22)	54,652	(18)	2,147	(36)
Mental disorders						
Substance abuse disorders	213,691	(10)	27,609	(32)	12,405	(8)
Mood	144,197	(15)	38,605	(26)	30,009	(2)
Adjustment	104,547	(19)	39,230	(25)	15,776	(5)
Anxiety	68,271	(27)	22,203	(42)	5,630	(18)
All other mental disorders	51,801	(33)	26,522	(37)	5,333	(20)
Tobacco dependence	18,597	(53)	9,839	(58)	58	(104)
Personality	13,507	(63)	5,627	(70)	1,973	(37)
Psychotic	7,704	(75)	1,236	(90)	8,160	(12)
Somatoform	4,329	(80)	1,591	(82)	524	(65)
Sense organ diseases						
Refraction/accommodation	352,084	(5)	260,248	(2)		
All other sense organ diseases	206,101	(12)	132,467	(9)	1,113	(48)
Glaucoma	12,103	(66)	7,720	(62)	22	(112)
Cataracts	1,555	(100)	917	(95)	4	(122)
Respiratory infections						
Upper respiratory	404,290	(3)	275,718	(1)	1,165	(46)
Lower respiratory	67,843	(28)	45,049	(23)	4,430	(25)
Otitis media	33,608	(43)	27,126	(33)	31	(110)
Musculoskeletal disease						
All other musculoskeletal disease	370,458	(4)	163,148	(5)	5,864	(17)
Other back problems	78,561	(25)	33,676	(30)	2,761	(30)
Other knee disorders	12,561	(65)	7,421	(63)	994	(50)
Osteoarthritis	10,415	(68)	7,239	(64)	482	(68)
Other shoulder disorders	9,009	(70)	5,673	(69)	240	(82)
Rheumatoid arthritis	2,590	(92)	1,023	(93)	53	(107)

¹ Categories defined in the Global Burden of Disease Study.

² Medical encounters: total hospitalizations and ambulatory visits for the condition.

³ Individuals affected: individuals with at least one hospitalization or ambulatory visit for the condition.

Table 1. (Continued) Health care burdens attributable to various diseases and injuries, US Armed Forces, 2004

Category ¹	Medical encounters ¹		Individuals affected ²		Hospital bed days	
	No.	Rank	No.	Rank	No.	Rank
Skin disease						
All other skin disease	233,697	(9)	133,790	(8)	8,515	(11)
Contact dermatitis	53,543	(32)	42,656	(24)	56	(105)
Sebaceous gland diseases	48,766	(35)	31,836	(31)	56	(105)
Infectious and parasitic disease						
All other infectious and parasitic diseases	159,179	(13)	106,333	(11)	3,689	(28)
Unspecified viral infection	65,838	(29)	53,438	(20)	432	(72)
STDs	27,925	(45)	21,448	(43)	845	(52)
Diarrheal disease	26,317	(46)	22,823	(41)	643	(59)
Tuberculosis	8,001	(72)	5,393	(72)	273	(79)
Chlamydia	6,675	(78)	5,933	(67)	13	(119)
Tropical cluster	3,641	(85)	698	(101)	202	(87)
Hep B and C	3,131	(90)	1,280	(89)	101	(96)
Bacterial meningitis	833	(110)	365	(105)	229	(84)
Malaria	402	(115)	180	(113)	209	(86)
Intestinal nematode infection	148	(121)	133	(116)	6	(121)
Respiratory disease						
Allergic rhinitis	94,333	(21)	52,791	(21)	16	(116)
All other respiratory disease	44,862	(37)	26,617	(35)	4,531	(24)
Asthma	38,251	(39)	19,017	(44)	619	(60)
Chronic sinusitis	21,442	(50)	16,457	(48)	186	(90)
COPD	18,170	(54)	15,841	(49)	230	(83)
Chronic obstructive pulmonary disease	7	(131)	6	(131)		
Digestive disease						
All other digestive disease	86,130	(23)	49,876	(22)	12,142	(9)
Other gastroenteritis and colitis	71,226	(26)	59,114	(17)	1,231	(43)
Esophagus disease	35,152	(41)	23,493	(39)	1,174	(45)
Inguinal hernia	14,230	(62)	6,536	(65)	926	(51)
Appendicitis	6,711	(77)	2,723	(78)	6,295	(15)
Peptic ulcer	1,497	(101)	1,035	(92)	495	(67)
Cirrhosis	1,153	(106)	724	(100)	138	(93)
Genitourinary disease						
All other genitourinary disease	107,733	(18)	65,827	(16)	4,115	(26)
Other urethra/urinary tract disorders	33,769	(42)	24,946	(38)	436	(71)
Menstrual disorders	17,703	(56)	12,903	(55)	538	(64)
Female genital pain	17,668	(57)	11,910	(56)	644	(58)
Other breast disorders	16,391	(60)	9,165	(59)	548	(63)
Kidney stones	15,212	(61)	6,181	(66)	1,265	(42)
Nephritis and nephrosis	3,927	(82)	1,400	(86)	818	(53)
Benign prostatic hypertrophy	1,741	(98)	1,308	(87)		
Cardiovascular disease						
Essential hypertension	61,973	(30)	34,088	(29)	318	(76)
All other cardiovascular disease	61,946	(31)	38,059	(28)	4,701	(23)
Ischemic	7,793	(74)	3,455	(76)	2,172	(35)
Cerebrovascular	3,229	(89)	1,304	(88)	1,662	(38)
Inflammatory	1,687	(99)	779	(98)	584	(62)
Rheumatic	632	(113)	516	(103)	38	(109)

¹ Categories defined in the Global Burden of Disease Study.² Medical encounters: total hospitalizations and ambulatory visits for the condition.³ Individuals affected: individuals with at least one hospitalization or ambulatory visit for the condition.

Table 1. (Continued) Health care burdens attributable to various diseases and injuries, US Armed Forces, 2004

Category ¹	Medical encounters ¹		Individuals affected ²		Hospital bed days	
	No.	Rank	No.	Rank	No.	Rank
Cerebrovascular	3,229	(89)	1,304	(88)	1,662	(38)
Inflammatory	1,687	(99)	779	(98)	584	(62)
Rheumatic	632	(113)	516	(103)	38	(109)
Endocrine disorders						
All other endocrine disorders	44,959	(36)	26,627	(34)	2,469	(33)
Lipoid metabolism disorders	36,164	(40)	26,616	(36)	30	(111)
Obesity	22,350	(48)	14,418	(52)	156	(91)
Maternal conditions						
Pregnancy complications	51,241	(34)	18,295	(45)	17,940	(4)
Delivery	39,586	(38)	15,703	(50)	39,967	(1)
Ectopic/miscarriage/abortion	7,489	(76)	3,766	(75)	710	(56)
Puerperium complications	2,274	(95)	1,538	(83)	597	(61)
All other maternal disorders	18	(130)	10	(130)		
Headache						
Headache	98,977	(20)	54,281	(19)	1,284	(41)
Other neoplasms						
All other neoplasms	25,026	(47)	18,090	(46)	2,261	(34)
Benign skin neoplasm	17,198	(59)	13,840	(53)	14	(118)
Lipoma	9,015	(69)	5,864	(68)	65	(101)
Uterine leiomyoma	3,608	(86)	1,722	(81)	1,624	(39)
Neurologic conditions						
All other neurologic conditions	21,409	(51)	10,980	(57)	3,104	(29)
Other mononeuritis - upper and lower limbs	7,944	(73)	4,663	(74)	187	(89)
Epilepsy	3,254	(88)	1,483	(85)	264	(80)
Multiple sclerosis	2,115	(96)	595	(102)	200	(88)
Other neuropsychiatric disorders	644	(112)	327	(108)		
Parkinson disease	114	(127)	51	(123)		
Alzheimer and other dementias	5	(132)	4	(132)		
Malignant neoplasms						
Lymphomas and multiple myeloma	5,156	(79)	857	(97)	755	(55)
Melanoma and skin cancer	3,906	(84)	2,073	(80)	149	(92)
All other malignant neoplasms	3,568	(87)	1,084	(91)	1,556	(40)
Breast	2,823	(91)	351	(107)	100	(98)
Testicular	2,386	(94)	500	(104)	370	(74)
Leukemia	1,918	(97)	171	(115)	1,190	(44)
Colon and rectum	1,449	(102)	207	(112)	474	(69)
Brain	1,237	(104)	180	(113)	462	(70)
Prostate	1,149	(107)	298	(109)	300	(78)
Thyroid	947	(109)	283	(110)	262	(81)
Mouth and oropharynx	645	(111)	244	(111)	88	(99)
Trachea, bronchus, and lung	372	(116)	88	(120)	118	(95)
Bladder	286	(117)	107	(117)	18	(115)
Esophagus	220	(118)	23	(128)	62	(103)

¹ Categories defined in the Global Burden of Disease Study.² Medical encounters: total hospitalizations and ambulatory visits for the condition.³ Individuals affected: individuals with at least one hospitalization or ambulatory visit for the condition.

Table 1. (Continued) Health care burdens attributable to various diseases and injuries, US Armed Forces, 2004

Category ¹	Medical encounters ¹		Individuals affected ²		Hospital bed days	
	No.	Rank	No.	Rank	No.	Rank
Ovarian	151	(120)	80	(121)	64	(102)
Liver	148	(121)	27	(126)	101	(96)
Stomach	136	(123)	35	(125)	213	(85)
Pancreas	122	(126)	27	(126)	66	(100)
Cervical	97	(128)	42	(124)	19	(114)
Uterine	73	(129)	20	(129)	16	(116)
Oral conditions						
All other oral conditions	22,315	(49)	16,763	(47)	2,522	(32)
Dental caries	1,200	(105)	937	(94)	41	(108)
Periodontal disease	1,088	(108)	911	(96)	7	(120)
Congenital anomalies						
All other congenital anomalies	20,169	(52)	14,484	(51)	1,150	(47)
Congenital heart disease	1,325	(103)	769	(99)	384	(73)
Diabetes mellitus						
Diabetes mellitus	17,820	(55)	5,160	(73)	784	(54)
Nutritional deficiencies						
All other nutritional deficiencies	8,480	(71)	5,624	(71)	516	(66)
Iron-deficiency anemia	2,524	(93)	1,532	(84)	131	(94)
Protein energy malnutrition	131	(124)	61	(122)	4	(122)
Conditions arising during the perinatal period						
All other perinatal anomalies	458	(114)	355	(106)	22	(112)
Birth asphyxia and birth trauma	168	(119)	101	(118)		
Low birth weight	125	(125)	95	(119)		

¹ Categories defined in the Global Burden of Disease Study.

² Medical encounters: total hospitalizations and ambulatory visits for the condition.

³ Individuals affected: individuals with at least one hospitalization or ambulatory visit for the condition.

Reportable Medical Events, Active Components, US Armed Forces, 2004

In the U.S. Armed Forces, data regarding medical events of special surveillance interest are collected and reported using service-specific electronic reporting programs. The Army uses the Reportable Medical Events System (RMES), the Air Force uses the Air Force Reportable Event Surveillance System (AFRESS), and the Navy uses the Navy Reportable Disease System (NRDS).

Army, Air Force, and Navy preventive medicine/public health activities at permanent installations worldwide collect and electronically transmit data regarding notifiable events to their respective service surveillance centers. From these centers, reports are forwarded to the Army Medical Surveillance Activity (AMSA) in Washington, DC. At AMSA, the data are integrated with personnel and other medical event data in the Defense Medical Surveillance System (DMSS).¹

Since 1998, 70 medical conditions² have been designated as reportable by the Department of Defense. The Army began electronic reporting of notifiable events data in 1994. During calendar year 2000, the medical surveillance centers of the Navy and Air Force began forwarding their reportable medical event case reports to AMSA for integration into the DMSS. The integration of data from all of the services enables summaries and analyses across the entire U.S. Armed Forces. This report summarizes frequencies, rates, and trends (through calendar year 2004) of reportable medical events among active duty military personnel.

General: During 2004, there were 13,935 reports of notifiable medical events that affected active component members of the U.S. Armed Forces. During the year, there were an average of 23.8, 9.9, and 4.5 case reports per day from Army, Air Force, and Navy medical treatment facilities, respectively. In 2004 compared to 2003, the number of reports increased by 2.7% from Army and decreased by 35.6% and 5.6% from Air Force and Navy installations, respectively (Tables 1,2,3).

Sexually-transmitted infections: In 2004, as in prior years, sexually-transmitted infections (due to

chlamydia, gonorrhea, syphilis, and non-gonococcal urethritis) accounted for approximately 90% (n=12,485) of all notifiable event reports among active servicemembers. *Chlamydia trachomatis* was the most frequently reported notifiable condition that affected servicemembers (n=9,980, 71.6% of all reports) (Tables 1,2,3).

Environmental: During 2004, military medical facilities reported 561 heat- and 74 cold-related injuries of active servicemembers. There were more heat injuries reported from Army facilities in 2004 than in any year since 2000; in contrast, Navy and Air Force facilities reported fewer or similar numbers of heat injuries in 2004 compared to recent years (Tables 1,2,3). The number of cold injury reports overall — all from Army installations — in 2004 was similar to numbers reported in recent years; however, there were more frostbite cases reported in 2004 than in any other year since 2000 (Tables 1,2,3).

Vaccine preventable illnesses: In 2004, there were no reports of diphtheria, measles, mumps, poliomyelitis, rabies, rubella, smallpox, tetanus, or yellow fever among active servicemembers. There were three reports of meningococcal disease, 11 of hepatitis A, 24 of varicella, 35 of pertussis, 44 of hepatitis B, and 142 of influenza among active servicemembers (Tables 1,2,3). Pertussis was the only vaccine preventable illness that was reported significantly more often among active servicemembers in 2004 than in recent years (Tables 1,2,3).

Arthropod-transmitted diseases: In 2004, as in 2003, the most frequently reported arthropod-transmitted disease among active servicemembers was cutaneous leishmaniasis (n=209). During the year, there were 94 reports of malaria among active servicemembers, and of those with known causes, 43 (59%) were reported as *P. falciparum* and 29 (40%) as *P. vivax* (Tables 1,2,3). During the year, there were 24 reports of Lyme disease among active servicemembers — more than in 2003 but fewer than in any other year since 2000 (Tables 1,2,3). Finally, in 2004, there were nine reports of Rocky Mountain spotted fever, four of

dengue, and one or none of other reportable arthropod-transmitted diseases (Tables 1,2,3).

Food/water-transmitted infections: In 2004, the most frequently reported food/water-transmitted infectious diseases that affected servicemembers were campylobacteriosis (n=59), salmonellosis (n=47), giardiasis (n=26), and shigellosis (n=17). In each case, the number of reports in 2004 was lower than in each of the previous 2 years (Tables 1,2,3). As in prior years, there were no or single reported cases among active servicemembers of amebiasis, cholera, *Escherichia coli* O157:H7, and typhoid fever (Tables 1,2,3).

Editorial comment: In the military, surveillance of reportable conditions is meant to provide military public health officials with timely information regarding current and emerging, potentially significant, public health and/or medical force protection problems. Hence, general summaries of reported medical conditions (such as presented here) should be interpreted cautiously. For example, in general, notifiable conditions are incompletely reported; and the completeness of reporting varies

across Services, medical facilities, and conditions themselves.³⁻⁵ In addition, there are few or no reports of notifiable conditions among servicemembers who are engaged in training exercises or combat operations—unless affected individuals receive care for the conditions at permanent military medical facilities (e.g., cutaneous leishmaniasis). Thus, complete assessments of frequencies, rates, and trends of notifiable conditions require reviews of more than reported cases alone (e.g., ambulatory visits, hospitalizations).

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Table 1. Reportable events¹ at Army medical treatment facilities² among active component personnel, 2000-2004

Diagnosis ³	2000	2001	2002	2003	2004	Diagnosis ³	2000	2001	2002	2003	2004
All reportable events	9,527	9,913	10,834	8,529	8,683	Listeriosis	.	.	.	1	.
Amebiasis	1	4	1	.	.	Lyme disease	25	14	19	11	20
Anthrax	.	.	.	.	.	Malaria, falciparum	3	13	10	4	8
Biol. warfare agent exposure	.	.	.	.	1	Malaria, malariae	.	1	.	.	.
Botulism	.	.	.	.	.	Malaria, ovale	.	1	1	.	1
Brucellosis	.	.	.	1	1	Malaria, unspecified	7	8	2	21	16
Campylobacteriosis	35	54	56	36	33	Malaria, vivax	48	25	47	49	26
Carbon monoxide poisoning	6	5	.	.	.	Measles	.	.	.	.	.
Chemical agent exposure	.	.	.	.	.	Meningococcal meningitis	2	1	4	2	1
Chlamydia	5,789	6,271	7,245	5,439	5,732	Meningococcal septicemia	.	.	.	.	.
Cholera	.	.	.	.	.	Mumps	2	1	.	1	.
Coccidioidomycosis	2	2	5	1	2	Pertussis	2	.	1	.	20
Cold weather, frostbite	41	60	49	39	63	Plague	.	.	.	.	.
Cold weather, hypothermia	1	.	.	3	.	Poliomyelitis	.	.	.	.	.
Cold weather, immersion type	13	13	19	12	6	Q fever	.	.	1	3	1
Cold weather, unspecified	24	19	13	9	5	Rabies, human	.	.	.	.	.
Cryptosporidiosis	.	.	.	.	.	Relapsing fever	.	.	.	.	.
Cyclospora	.	.	.	.	.	Rheumatic fever, acute	.	.	.	.	.
Dengue fever	1	1	5	.	1	Rift Valley fever	.	.	.	.	.
Diphtheria	.	.	.	.	.	Rocky Mountain spotted fever	12	2	.	.	6
<i>Escherichia coli</i> O157:H7	9	3	1	.	.	Rubella	.	.	.	.	.
Ehrlichiosis	.	.	.	.	.	Salmonellosis	41	60	46	31	30
Encephalitis	.	2	.	.	.	Schistosomiasis	1	.	.	.	.
Filariasis	1	.	.	.	1	Shigellosis	7	8	15	35	15
Giardiasis	16	20	11	18	17	Smallpox	.	.	.	.	.
Gonorrhea	1,713	1,807	2,053	1,287	1,300	<i>Streptococcus</i> , group A, inv.	.	5	3	4	2
<i>H. influenzae</i> , invasive	1	2	.	2	.	Syphilis, congenital	1	1	.	1	.
Hantavirus infection	.	.	.	2	.	Syphilis, latent	17	8	14	7	10
Heat exhaustion	240	262	267	126	285	Syphilis, primary/secondary	30	20	19	18	35
Heat stroke	53	116	91	88	167	Syphilis, tertiary	3	7	.	4	.
Hemorrhagic fever	2	2	.	1	.	Tetanus	.	.	.	.	.
Hepatitis A	3	8	4	6	6	Toxic shock syndrome	.	.	.	.	.
Hepatitis B	21	28	18	10	15	Trichinosis	.	.	1	.	1
Hepatitis C	16	22	3	6	23	Trypanosomiasis	.	.	.	.	.
Influenza	7	24	13	185	88	Tuberculosis, pulmonary	3	4	5	3	5
Lead poisoning	.	.	.	.	.	Tularemia	1	.	.	1	.
Legionellosis	.	1	1	.	.	Typhoid fever	.	1	.	.	.
Leishmaniasis, cutaneous	.	.	2	513	205	Typhus fever	.	.	.	.	.
Leishmaniasis, mucocutaneous	.	.	.	.	.	Urethritis, non-gonococcal	1,225	969	757	442	511
Leishmaniasis, unspecified	.	.	.	.	.	Vaccine, adverse event	35	4	6	75	18
Leishmaniasis, visceral	.	1	.	1	1	Varicella	65	31	18	23	20
Leprosy	.	.	4	.	1	West Nile virus	.	.	.	3	1
Leptospirosis	2	2	4	5	1	Yellow fever	.	.	.	.	.

¹ Events reported by April 7, 2005

² Main and satellite clinics.

³ Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting varies by facility

Source: Reportable Events Surveillance System

Table 2. Reportable events¹ at Navy medical treatment facilities² among active component personnel, 2000-2004

Diagnosis ³	2000	2001	2002	2003	2004	Diagnosis ³	2000	2001	2002	2003	2004
All reportable events	606	1,383	3,120	1,744	1,641	Listeriosis	.	.	.	.	.
Amebiasis	.	1	.	.	.	Lyme disease	.	9	14	3	3
Anthrax	.	.	.	.	.	Malaria, falciparum	2	.	.	4	33
Bio.I warfare agent exposure	.	.	.	.	.	Malaria, malariae	.	.	.	.	.
Botulism	.	.	.	.	.	Malaria, ovale	.	.	.	.	.
Brucellosis	.	.	.	.	.	Malaria, unspecified	.	.	2	3	4
Campylobacteriosis	3	2	8	2	3	Malaria, vivax	.	.	.	3	.
Carbon monoxide poisoning	.	.	.	.	.	Measles	.	.	.	.	.
Chemical agent exposure	.	.	1	.	.	Meningococcal meningitis	.	2	2	2	.
Chlamydia	309	1,045	1,958	1,276	1,090	Meningococcal septicemia	1	.	1	1	.
Cholera	.	.	1	.	.	Mumps	1	.	.	.	.
Coccidioidomycosis	4	7	7	5	1	Pertussis	.	.	.	.	.
Cold weather, frostbite	.	.	.	.	.	Plague	.	.	.	.	.
Cold weather, hypothermia	.	.	.	.	.	Poliomyelitis	.	.	.	.	.
Cold weather, immersion type	.	.	.	.	.	Q fever	.	.	.	.	.
Cold weather, unspecified	.	.	1	.	.	Rabies, human	.	.	.	.	.
Cryptosporidiosis	.	.	.	.	.	Relapsing fever	.	.	.	.	.
Cyclospora	.	.	.	.	.	Rheumatic fever, acute	.	.	1	.	.
Dengue fever	1	.	.	.	3	Rift Valley fever	.	.	.	.	.
Diphtheria	.	.	.	.	.	Rocky Mountain spotted fever	.	.	.	.	3
<i>Escherichia coli</i> O157:H7	.	.	.	.	.	Rubella	.	.	.	.	.
Ehrlichiosis	.	.	.	.	.	Salmonellosis	3	7	9	18	5
Encephalitis	.	1	.	.	1	Schistosomiasis	.	.	1	.	.
Filariasis	.	.	.	.	.	Shigellosis	1	2	3	5	1
Giardiasis	6	2	6	4	8	Smallpox	.	.	.	.	.
Gonorrhea	98	233	463	240	213	<i>Streptococcus</i> , group A, inv.	.	2	15	2	2
<i>H. influenzae</i> , invasive	.	.	.	.	.	Syphilis, congenital	.	.	1	1	7
Hantavirus infection	.	.	.	.	.	Syphilis, latent	3	7	2	2	3
Heat exhaustion	37	7	160	97	96	Syphilis, primary/secondary	1	3	7	12	14
Heat stroke	2	1	26	8	7	Syphilis, tertiary	.	.	.	.	1
Hemorrhagic fever	.	.	.	.	.	Tetanus	1	.	.	.	.
Hepatitis A	.	.	.	.	2	Toxic shock syndrome	.	.	.	.	.
Hepatitis B	4	8	8	5	6	Trichinosis	.	.	2	.	.
Hepatitis C	1	4	3	3	4	Trypanosomiasis	.	.	.	.	.
Influenza	.	1	2	2	1	Tuberculosis, pulmonary	2	5	4	4	4
Lead poisoning	.	.	.	.	.	Tularemia	.	.	.	.	.
Legionellosis	.	.	.	.	.	Typhoid fever	.	.	.	.	.
Leishmaniasis, cutaneous	.	.	1	.	2	Typhus fever	.	3	.	1	.
Leishmaniasis, mucocutaneous	.	.	.	.	.	Urethritis, non-gonococcal	118	21	400	32	118
Leishmaniasis, unspecified	.	.	.	.	1	Vaccine, adverse event	.	2	3	5	2
Leishmaniasis, visceral	.	.	.	.	.	Varicella	8	7	8	4	4
Leprosy	.	.	.	.	.	West Nile virus	.	.	.	.	.
Leptospirosis	.	1	.	.	1	Yellow fever	.	.	.	.	.

¹ Events reported by April 7, 2005

² Main and satellite clinics

³ Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting varies by facility

Source: Reportable Events Surveillance System

Table 3. Reportable events¹ at Air Force medical treatment facilities² among active component personnel, 2000-2004

Diagnosis ³	2000	2001	2002	2003	2004	Diagnosis ³	2000	2001	2002	2003	2004
All reportable events	4,018	4,386	5,533	5,608	3,611	Listeriosis	.	.	.	.	.
Amebiasis	1	.	1	1	.	Lyme disease	8	11	5	1	1
Anthrax	.	.	.	.	.	Malaria, falciparum	2	.	5	3	2
Biol. warfare agent exposure	.	.	.	.	.	Malaria, malariae	1	.	.	.	.
Botulism	.	.	.	.	.	Malaria, ovale	.	1	.	.	.
Brucellosis	.	.	.	1	.	Malaria, unspecified	1	.	.	4	1
Campylobacteriosis	38	24	30	23	23	Malaria, vivax	2	3	2	3	3
Carbon monoxide poisoning	.	.	.	.	.	Measles	.	.	.	.	.
Chemical agent exposure	.	.	.	.	.	Meningococcal meningitis	1	.	.	.	2
Chlamydia	3,072	3,643	4,694	4,706	3,158	Meningococcal septicemia	.	.	.	.	.
Cholera	.	.	.	.	.	Mumps	1	2	1	.	.
Coccidioidomycosis	4	6	2	1	.	Pertussis	4	2	.	2	15
Cold weather, frostbite	2	1	.	.	.	Plague	.	.	.	.	.
Cold weather, hypothermia	1	.	.	.	.	Poliomyelitis	.	.	.	.	.
Cold weather, immersion type	.	.	.	.	.	Q fever	.	.	.	2	.
Cold weather, unspecified	.	1	.	.	.	Rabies, human	.	.	.	.	.
Cryptosporidiosis	.	.	.	.	.	Relapsing fever	.	.	.	.	.
Cyclospora	.	.	.	.	.	Rheumatic fever, acute	1	.	.	.	.
Dengue fever	.	1	.	.	.	Rift Valley fever	.	.	.	.	.
Diphtheria	.	.	.	.	.	Rocky Mountain spotted fever	.	.	1	.	.
<i>Escherichia coli</i> O157:H7	1	1	.	.	1	Rubella	.	.	.	.	.
Ehrlichiosis	.	.	.	.	.	Salmonellosis	25	18	14	17	12
Encephalitis	.	.	.	2	2	Schistosomiasis	.	.	.	.	.
Filariasis	.	.	.	.	.	Shigellosis	6	11	23	13	1
Giardiasis	18	16	13	9	1	Smallpox	.	.	.	.	.
Gonorrhea	428	406	412	470	275	<i>Streptococcus</i> , group A, inv.	9	2	1	3	1
<i>H. influenzae</i> , invasive	1	.	.	.	.	Syphilis, congenital	1	1	.	3	2
Hantavirus infection	.	1	.	.	.	Syphilis, latent	3	5	4	7	3
Heat exhaustion	76	25	18	11	5	Syphilis, primary/secondary	10	8	11	12	11
Heat stroke	1	1	.	.	1	Syphilis, tertiary	.	.	.	.	.
Hemorrhagic fever	.	.	.	.	.	Tetanus	.	.	.	.	.
Hepatitis A	3	7	7	3	3	Toxic shock syndrome	.	.	.	.	.
Hepatitis B	48	29	58	41	23	Trichinosis	2	1	1	2	2
Hepatitis C	45	21	33	12	8	Trypanosomiasis	.	.	.	.	.
Influenza	155	106	169	230	53	Tuberculosis, pulmonary	1	1	2	1	.
Lead poisoning	.	.	.	.	.	Tularemia	.	.	.	.	.
Legionellosis	1	.	2	2	.	Typhoid fever	.	1	.	1	.
Leishmaniasis, cutaneous	.	.	.	3	.	Typhus fever	.	.	.	.	.
Leishmaniasis, mucocutaneous	.	.	.	.	.	Urethritis, non-gonococcal	34	20	16	7	2
Leishmaniasis, unspecified	.	.	.	.	.	Vaccine, adverse event	.	.	.	.	.
Leishmaniasis, visceral	.	.	.	.	.	Varicella	11	10	8	11	.
Leprosy	.	.	.	1	.	West Nile virus	.	.	.	.	.
Leptospirosis	.	.	.	.	.	Yellow fever	.	.	.	.	.

¹ Events reported by April 7, 2005

² Main and satellite clinics

³ Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting varies by facility

Source: Reportable Events Surveillance System

Pre- and Post-deployment Health Assessments, US Armed Forces, January 2003-December 2004

The June 2003 issue of the *MSMR* summarized the background, rationale, policies, and guidelines related to pre-deployment and post-deployment health assessments of servicemembers.¹⁻

¹⁰ Briefly, prior to deploying, the health of each servicemember is assessed to ensure his/her medical fitness and readiness for deployment. At the time of redeployment, the health of each servicemember is again assessed to identify medical conditions and/or exposures of concern to ensure timely and comprehensive evaluation and treatment.

Completed pre- and post-deployment health assessment forms are routinely sent to the Army Medical Surveillance Activity (AMSA) where they are archived in the Defense Medical Surveillance System (DMSS).¹¹ In the DMSS, data recorded on pre- and post-deployment health assessments are integrated with data that document demographic characteristics, military experiences, and medical encounters of all servicemembers (e.g., hospitalizations, ambulatory visits, immunizations).¹¹ The continuously expanding DMSS database can be used to monitor the health of servicemembers who participated in major overseas deployments.¹¹⁻¹³

The overall success of deployment force health protection efforts depends at least in part on the completeness and quality of pre- and post-deployment health assessments. This report summarizes information related to pre- and post-deployment forms that were completed between 1 January 2003 and 31 December 2004. The report summarizes characteristics of servicemembers who completed forms, responses to selected questions prior to and after deployment service, and changes in responses of individuals from pre- to post-deployment.

Methods. For this update, the period of interest was 1 January 2003 to 31 December 2004. The DMSS was searched to identify all pre-deployment (DD Form 2795) and post-deployment (DD Form 2796) health assessments that were completed during the period of interest.

Results. During the 2-year period, 831,726 pre-deployment health assessments and 737,880 post-

deployment health assessments were completed at field sites, shipped to AMSA, and entered into the DMSS database (Table 1).

In general, respondents reported their overall health statuses as better on pre- than to post-deployment forms (Figure 1). On both sets of forms, the most frequent descriptor of overall health was "very good." However, relatively more pre- (32%) than post- (22%) deployment respondents assessed their overall health as "excellent," while relatively more post- (41%) than pre- (26%) deployment respondents assessed their overall health as "good," "fair," or "poor" (Figure 1).

Among servicemembers (n=357,450) who completed both pre- and post-deployment health assessments, nearly half (46%) chose the same descriptor of their overall health before and after deploying (Figures 2, 3). Of those (n=191,550) who changed their assessments from pre- to post-deployment, approximately three-fourths (77%) changed by a single category (on a five category scale) (Figure 2, 3). Of those who changed their assessments by more than one category, approximately 5-times more indicated a decrement (n=37,255; 10% of all respondents) than an improvement (n=7,200; 2% of all respondents) (Figure 3).

During post-deployment assessments, approximately 21% of active and 37% of Reserve component members had medical or dental problems that developed during deployment. In general, medical/dental problems were more frequent among soldiers and Marines than members of the other Services (Table 2).

Approximately 3% and 5% of active and Reserve component members, respectively, sought or intended to seek counseling or care for mental health concerns. Mental health concerns were reported relatively more frequently among soldiers (active: 5%; Reserve: 6%) than members of the other Services (Table 2).

From 6% (active component, Navy) to 26% (active component, Army) of post-deployment forms documented that "referrals" were indicated (Table 2). More than 80% of servicemembers with indications for referrals had a hospitalization or ambulatory visit

within six months of their post-deployment assessments (Table 2).

Approximately 12% of active and 21% of Reserve component members reported concerns about possible exposures or events during deployment that may affect their health (Table 2). Also, prevalences of exposure concerns increased monotonically with age—from 7.5% among <20 year olds to 21.2% among those 40 and older (table 3). In each age group, exposure concerns were more prevalent among Reserve than active component members (Table 4). Soldiers (active: 18%; Reserve: 23%) and Marines (active: 11%; Reserve: 28%) were more likely to have concerns about deployment-related exposures than members of the other Services (Tables 2, 3). Females (17%) and officers (17%) were more likely to report exposure concerns than their respective counterparts (Table 3). Finally, throughout the period, prevalences of exposure concerns were consistently higher among Reserve than active component redeployers (Figure 4).

Editorial comment. During the two year period from January 2003 through December 2004, approximately three-fourths of U.S. servicemembers assessed their overall health as “very good” or “excellent” at the time they were mobilized and/or prior to deploying overseas. Relatively fewer (59%) servicemembers assessed their overall health as “very good” or “excellent” at the end of their overseas deployments. Most changes in assessments of overall health from pre- to post-deployment were relatively small (i.e., one category on a 5-category scale). However, more than 10% of all post-deployers indicated relatively significant declines (i.e., two or more categories) in assessments of their overall health from pre- to post-deployment.

The findings are not surprising considering the extreme physical and psychological stresses associated with mobilization, overseas deployment, and harsh and dangerous living and working conditions.^{14,15} The deployment health assessment process is specifically designed to identify, assess, and follow-up as necessary all servicemembers with concerns regarding their health and/or deployment-related exposures. Overall, for example, approximately one-fifth of all post-deployers had “referral indications” documented on post-deployment health assessments; and of those with referral indications, most (range, by service and component: 57%-97%) had docu-

mented outpatient visits and/or hospitalizations within 6 months after they returned.

Overall, nearly one of every 6 servicemembers who completed post-deployment health assessments reported concerns about exposures or events during deployment that might have health effects. Of demographic factors, the strongest correlate of reporting an exposure concern was older age. The higher crude prevalences of exposure concerns among Reserve (versus active) component members and officers (versus enlisted), for example, may be related at least in part to differences in the ages of the respective groups. Trends in the numbers and natures of deployment-related exposure concerns will be monitored as more servicemembers return from overseas assignments and/or demobilize.

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Figure 1. Percent distributions of self-assessed health status, pre- and post-deployment, US Armed Forces, January 2003-December 2004.

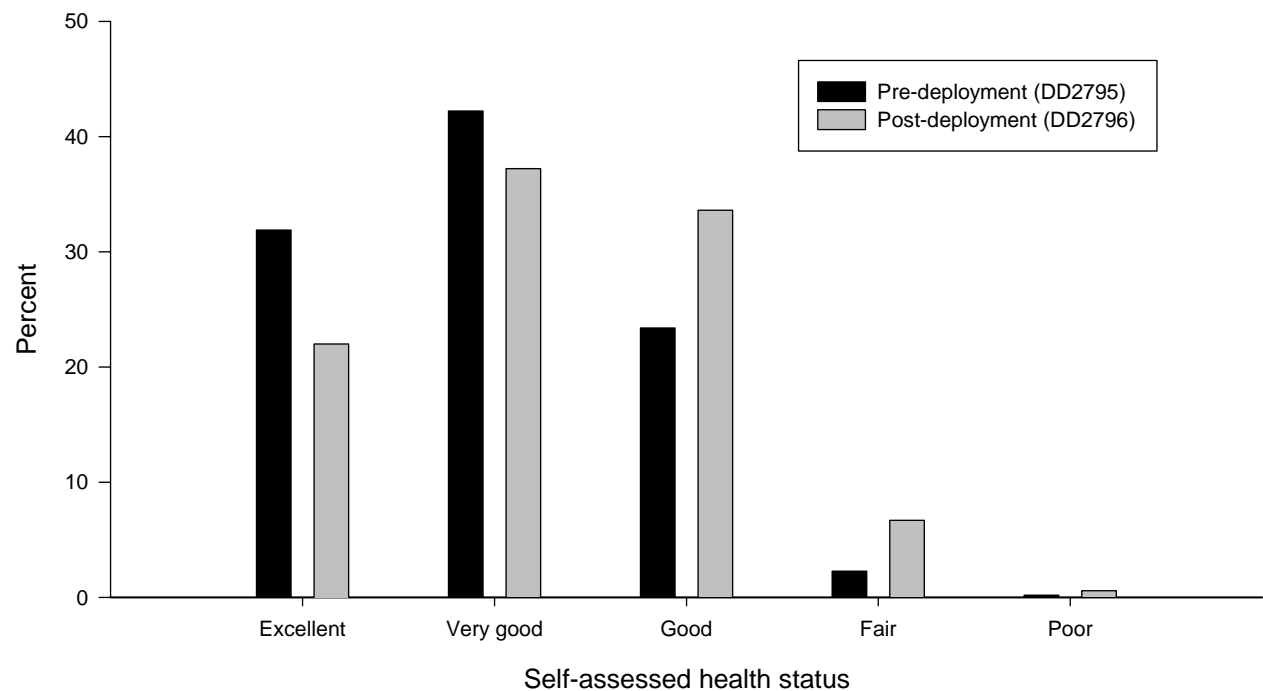


Table 1. Total pre-deployment and post-deployment health assessments, by month and year, US Armed Forces, January 2003-December 2004

	Pre-deployment		Post-deployment	
	No.	%	No.	%
Total	831,726	100.0	737,880	100.0
2003				
January	69,060	8.3	5,970	0.8
February	109,825	13.2	4,708	0.6
March	69,701	8.4	6,319	0.9
April	37,413	4.5	19,217	2.6
May	12,813	1.5	90,327	12.2
June	14,387	1.7	65,103	8.8
July	17,899	2.2	52,063	7.1
August	16,153	1.9	34,843	4.7
September	12,570	1.5	32,052	4.3
October	23,951	2.9	26,252	3.6
November	19,404	2.3	20,343	2.8
December	35,710	4.3	21,027	2.8
2004				
January	67,320	8.1	39,009	5.3
February	39,026	4.7	32,032	4.3
March	22,687	2.7	65,866	8.9
April	19,582	2.4	43,726	5.9
May	27,374	3.3	17,596	2.4
June	24,224	2.9	27,892	3.8
July	22,370	2.7	24,007	3.3
August	33,785	4.1	22,489	3.0
September	31,485	3.8	23,755	3.2
October	34,695	4.2	15,412	2.1
November	33,694	4.1	21,427	2.9
December	36,598	4.4	26,445	3.6

**Table 2. Responses to selected questions from post-deployment forms (DD2796)
by service and component, US Armed Forces, January 2003-December 2004**

	Army	Navy	Air Force	Marines	Total
Active component					
SMs with DD 2796 at AMSA	189,994	75,679	70,051	62,601	398,325
Electronic version	59%	2%	32%	9%	38%
General health ("fair" or "poor")	9%	5%	2%	6%	6%
Medical/dental problems during deploy	28%	12%	11%	19%	20%
Currently on profile	10%	2%	2%	3%	6%
Mental health concerns	5%	2%	1%	2%	3%
Exposure concerns	17%	5%	5%	11%	12%
Health concerns	14%	6%	5%	8%	10%
Referral indicated	25%	6%	9%	13%	17%
Med. visit following referral ¹	97%	71%	91%	63%	86%
Post deployment serum ²	89%	80%	80%	82%	85%
Reserve component					
SMs with DD 2796 at AMSA	157,086	11,534	26,431	13,268	208,319
Electronic version	55%	10%	19%	11%	47%
General health ("fair" or "poor")	11%	6%	2%	9%	10%
Medical/dental problems during deploy	41%	35%	17%	35%	37%
Currently on profile	15%	4%	2%	4%	12%
Mental health concerns	6%	3%	1%	3%	5%
Exposure concerns	23%	15%	10%	28%	21%
Health concerns	21%	21%	9%	23%	20%
Referral indicated	25%	17%	12%	24%	23%
Med. visit following referral ¹	86%	87%	63%	57%	81%
Post deployment serum ²	88%	88%	67%	81%	85%

¹ Inpatient or outpatient visit within 6 months after referral.

² Only calculated for DD 2796 completed since 1 June 2003.

Figure 2. Self-assessed health status on post-deployment form in relation to self assessed health status on pre-deployment form, US Armed Forces, January 2003-December 2004.

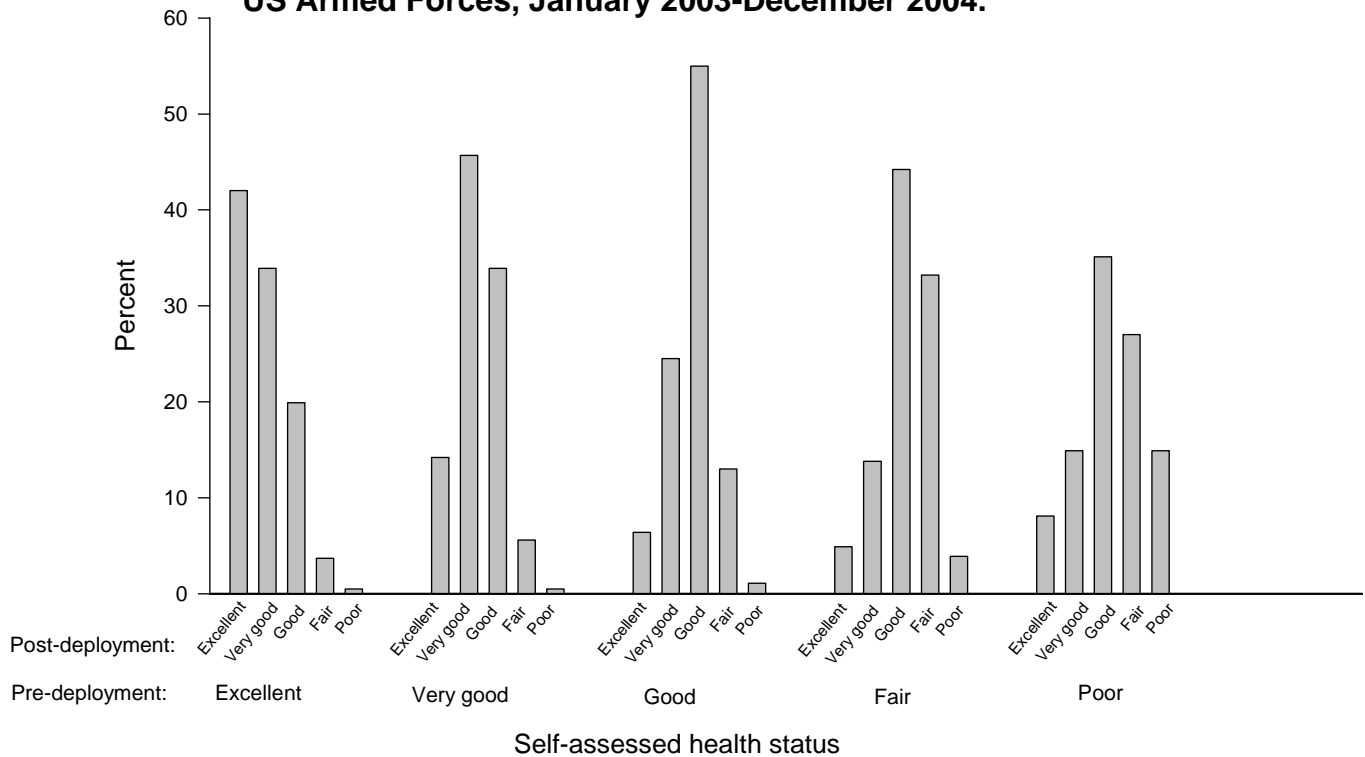
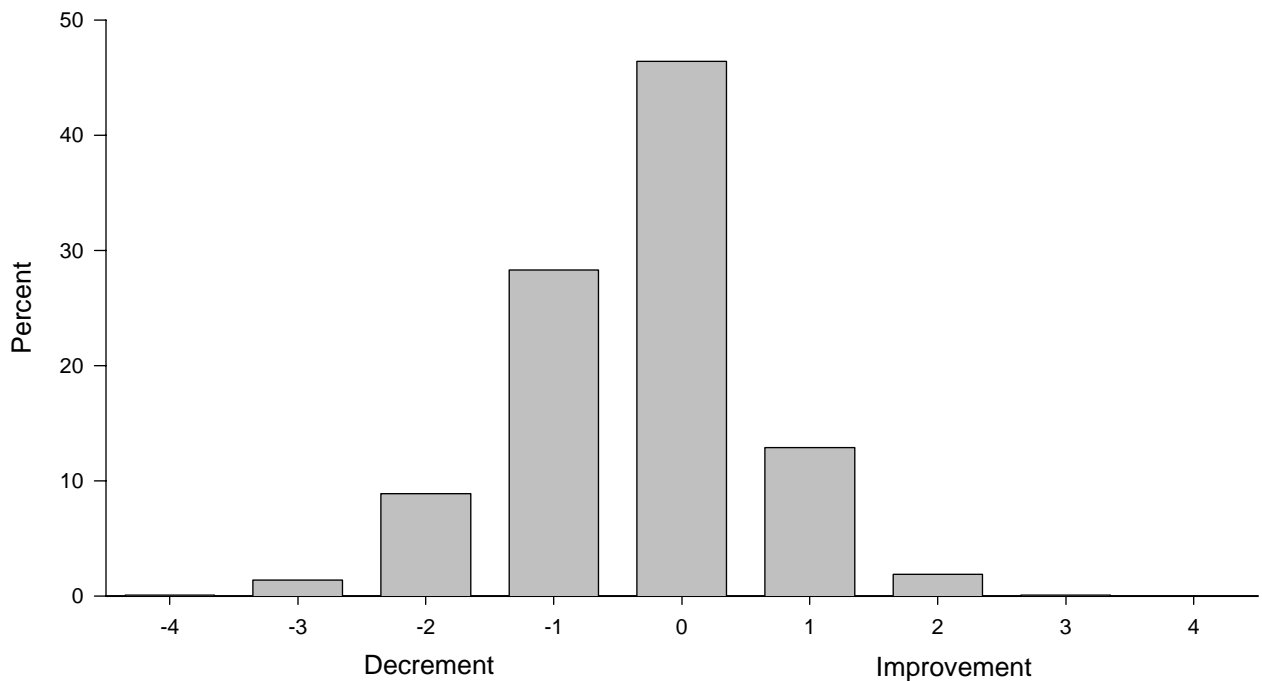


Figure 3. Distribution of self-assessed health status changes from pre- to post-deployment, US Armed Forces, January 2003-December 2004.



Change in self-assessment of overall health status, pre- to post-deployment, calculated as: post deployment response - pre-deployment response, using the following scale for health status: 1= "poor"; 2="fair"; 3="good"; 4="very good"; and 5="excellent."

Table 3. Deployment-related "exposure concerns" on post-deployment health assessments, US Armed Forces, January 2003-December 2004

	Total ¹	Exposure concerns	% with exposure concerns
Total	595,324	90,039	15.1
Component			
Active	389,135	46,649	12.0
Reserve	206,189	43,390	21.0
Service			
Army	340,274	67,654	19.9
Navy	87,165	5,379	6.2
Air Force	92,186	6,294	6.8
Marine Corps	75,699	10,712	14.2
Age (years)			
<20	20,003	1,499	7.5
20-29	316,512	40,562	12.8
30-39	164,549	28,032	17.0
>39	94,252	19,946	21.2
Gender			
Men	528,384	78,592	14.9
Women	66,939	11,447	17.1
Race/ethnicity			
Black	107,387	17,518	16.3
Hispanic	59,604	9,645	16.2
Other	1,321	162	12.3
White	386,800	57,040	14.7
Grade			
Enlisted	519,808	77,452	14.9
Officer	75,515	12,586	16.7

¹Total does not reflect missing responses to exposure concerns or missing characteristics.

Figure 4. Prevalence (%) of post-deployment forms that indicate "exposure concerns," by month, US Armed Forces, January 2003-December 2004.

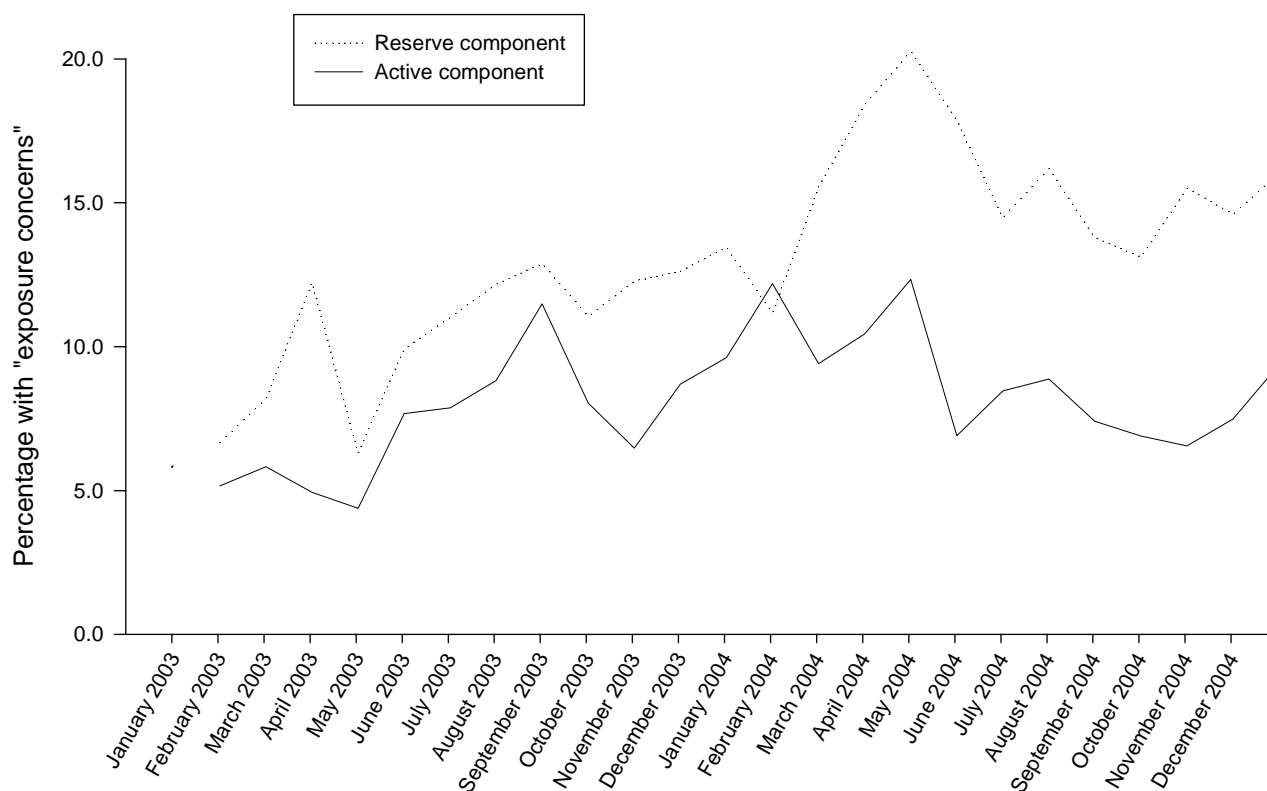


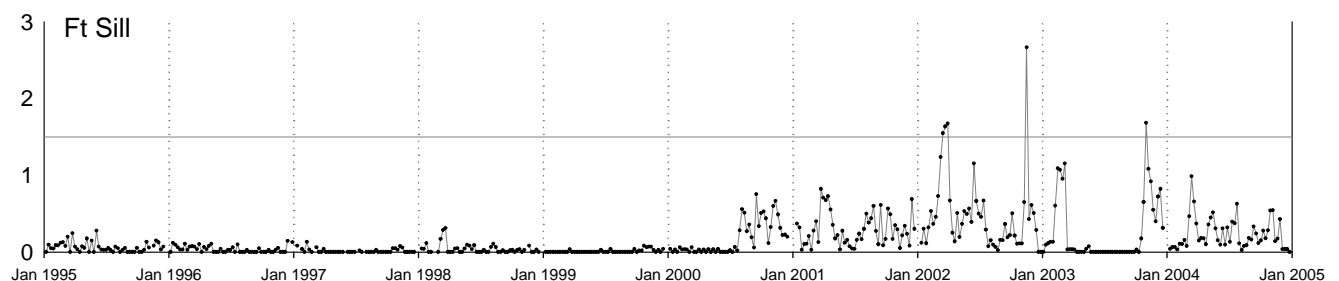
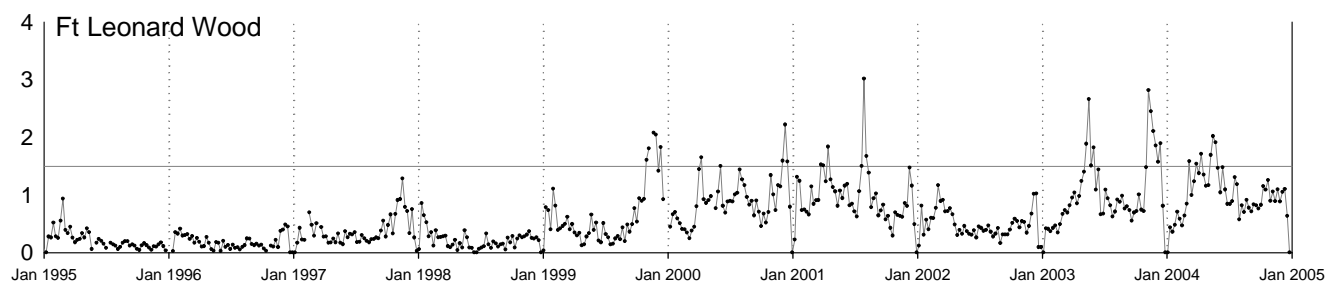
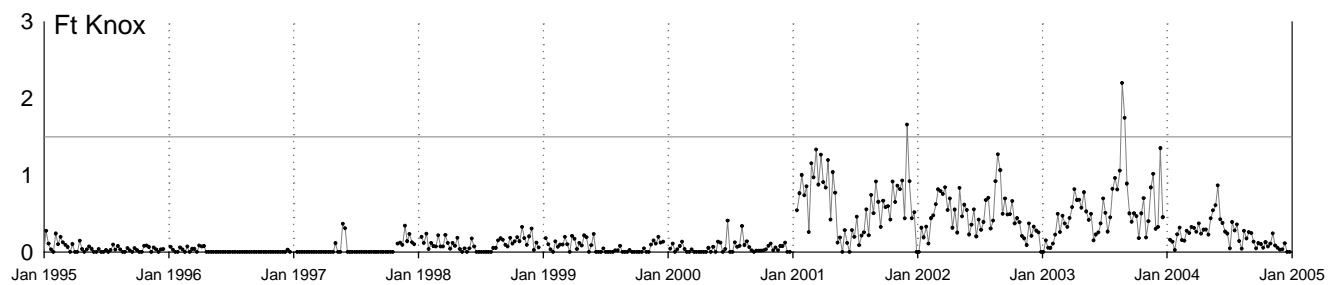
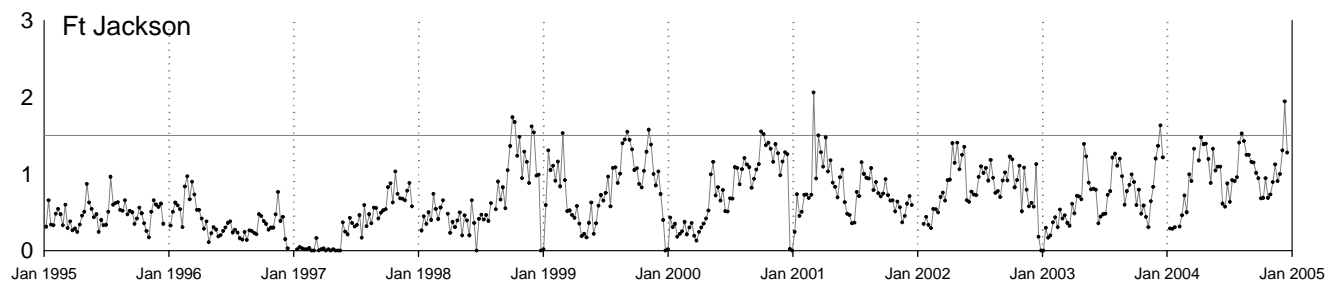
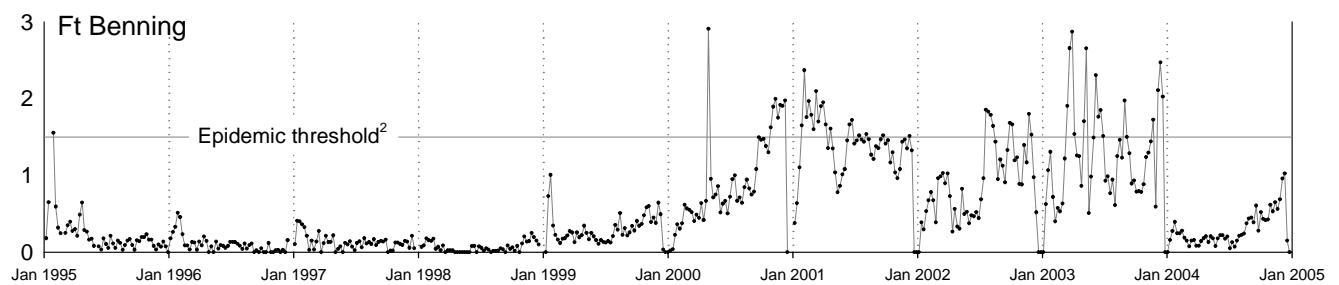
Table 4. Prevalence (%) of post-deployment forms that indicate exposure concerns, by age group and component, US Armed Forces, January 2003-December 2004

Age Group	Active	Reserve
<20	6.7	11.5
20-29	10.9	19.1
30-39	14.1	21.5
>39	16.8	23.4

Note: 1 person missing due to unknown age group

Acute respiratory disease (ARD), by week, Army basic training centers, 1995-2004.

ARD Rate¹



¹ARD rate = cases per 100 trainees per week

²ARD rate ≥ 1.5 for 2 weeks defines epidemic

**Table 1. Demographic characteristics of active component members,
by Service, US Armed Forces, 2004**

Characteristic	Army		Navy		Air Force		Marine Corps	
	No.	%	No.	%	No.	%	No.	%
Total¹	493,615	100.0	367,722	100.0	370,226	100.0	177,130	100.0
Gender								
Men	421,238	85.3	314,397	85.5	297,635	80.4	166,423	94.0
Women	72,377	14.7	53,325	14.5	72,591	19.6	10,707	6.0
Age (years)								
< 20	39,032	7.9	27,834	7.6	21,606	5.8	28,575	16.1
20-24	165,657	33.6	122,125	33.2	113,192	30.6	81,017	45.7
25-29	105,069	21.3	76,686	20.9	78,987	21.3	30,230	17.1
30-34	75,841	15.4	54,087	14.7	53,756	14.5	17,154	9.7
35-39	59,621	12.1	47,176	12.8	52,444	14.2	11,748	6.6
40-44	32,634	6.6	26,695	7.3	36,445	9.8	5,898	3.3
45-49	11,419	2.3	9,675	2.6	10,675	2.9	2,006	1.1
50-54	3,462	0.7	2,817	0.8	2,581	0.7	427	0.2
55-59	742	0.2	528	0.1	484	0.1	72	0.0
> 59	132	0.0	97	0.0	54	0.0	3	0.0
Race/ethnicity								
White non-hispanic	296,656	60.1	224,609	61.1	265,771	71.8	113,789	64.2
Black non-hispanic	111,691	22.6	69,410	18.9	55,354	15.0	20,947	11.8
Hispanic	50,946	10.3	31,460	8.6	20,604	5.6	24,210	13.7
Asian/Pacific Islander	18,949	3.8	24,981	6.8	14,067	3.8	5,599	3.2
Native American/Alaskan	4,622	0.9	10,477	2.8	2,839	0.8	4,831	2.7
Other	0	0.0	2,048	0.6	2,542	0.7	845	0.5
Marital status								
Single	218,441	44.3	173,702	47.2	128,079	34.6	93,046	52.5
Married	253,615	51.4	194,020	52.8	218,646	59.1	78,411	44.3
Other ²	20,903	4.2	0	0.0	22,834	6.2	5,665	3.2
Education								
High school or less	347,724	70.4	290,670	79.0	239,749	64.8	152,420	86.0
Some college	33,525	6.8	18,107	4.9	42,188	11.4	4,223	2.4
Bachelors	60,561	12.3	37,771	10.3	46,722	12.6	15,289	8.6
Masters	20,629	4.2	5,655	1.5	30,474	8.2	2,790	1.6
Doctorate	9,150	1.9	4,056	1.1	7,852	2.1	445	0.3
Grade								
Enlisted								
E1-E4	228,322	46.3	149,913	40.8	136,265	36.8	107,026	60.4
E5-E9	184,997	37.5	163,695	44.5	160,135	43.3	51,517	29.1
Officer								
O1-O3 (W1-W3)	50,929	10.3	32,661	8.9	43,655	11.8	12,247	6.9
O4-O9 (W4-W5)	29,348	5.9	21,440	5.8	30,151	8.1	6,335	3.6

¹ Subgroups may not add up to total due to missing values.

² Includes separated, widowed, divorced.

Table 2. Military occupations¹ of active component members, by Service, US Armed Forces, 2004

Characteristic	Army		Navy		Air Force		Marine Corps	
	No.	%	No.	%	No.	%	No.	%
Total	493,615	100.0	367,722	100.0	370,226	100.0	177,130	100.0
Enlisted²								
Infantry, seamen, gun crews	106,943	21.7	29,401	8.0	28,940	7.8	36,232	20.5
Electronic equip repair	26,477	5.4	39,788	10.8	26,851	7.3	10,831	6.1
Communications, intelligence	46,672	9.5	29,197	7.9	24,246	6.5	11,307	6.4
Health care	32,642	6.6	26,296	7.2	21,868	5.9	0	0.0
Technical and allied support	14,279	2.9	3,660	1.0	11,775	3.2	4,073	2.3
Funct support, admin	64,359	13.0	35,984	9.8	61,384	16.6	25,307	14.3
Electric/mech equip repair	57,882	11.7	88,307	24.0	73,144	19.8	25,482	14.4
Craftworkers	7,350	1.5	17,784	4.8	14,167	3.8	3,989	2.3
Service, supply handlers	53,134	10.8	20,989	5.7	14,738	4.0	19,760	11.2
Non-occupational	3,576	0.7	22,206	6.0	18,995	5.1	21,553	12.2
Officers²								
General officers and executives	317	0.1	221	0.1	665	0.2	740	0.4
Tactical operations	28,949	5.9	20,969	5.7	24,045	6.5	8,480	4.8
Intelligence	5,172	1.0	2,350	0.6	3,610	1.0	908	0.5
Engineering and maintenance	11,738	2.4	6,363	1.7	10,973	3.0	2,092	1.2
Scientists, professionals	4,844	1.0	2,139	0.6	4,601	1.2	488	0.3
Health care	13,959	2.8	10,740	2.9	11,788	3.2	0	0.0
Administrators	5,564	1.1	1,933	0.5	5,326	1.4	1,512	0.9
Supply, allied specialists	8,014	1.6	3,404	0.9	6,552	1.8	2,393	1.4
Non-occupational	1,437	0.3	5,990	1.6	3,356	0.9	1,956	1.1

¹ Based on DoD occupational area codes.

² Subgroups may not add up to total due to missing values.

**Table 3. Demographic characteristics of Reserves, by Service,
US Armed Forces, 2004**

Characteristic	Army		Navy		Air Force		Marine Corps	
	No.	%	No.	%	No.	%	No.	%
Total¹	201,578	100.0	81,659	100.0	74,882	100.0	39,902	100.0
Gender								
Men	153,877	76.3	64,833	79.4	57,480	76.8	38,018	95.3
Women	47,700	23.7	16,826	20.6	17,402	23.2	1,884	4.7
Age (years)								
< 20	16,892	8.4	560	0.7	1,494	2.0	4,718	11.8
20-24	45,556	22.6	6,022	7.4	7,895	10.5	19,384	48.6
25-29	28,713	14.2	10,237	12.5	8,151	10.9	7,169	18.0
30-34	25,269	12.5	16,788	20.6	10,032	13.4	3,251	8.1
35-39	28,314	14.0	21,255	26.0	14,603	19.5	2,601	6.5
40-44	26,003	12.9	15,257	18.7	14,989	20.0	1,754	4.4
45-49	16,050	8.0	6,889	8.4	9,042	12.1	732	1.8
50-54	8,951	4.4	3,205	3.9	5,562	7.4	226	0.6
55-59	5,572	2.8	1,353	1.7	3,052	4.1	65	0.2
> 59	246	0.1	92	0.1	62	0.1	1	0.0
Race/ethnicity								
White non-hispanic	119,263	59.2	51,413	63.0	52,907	70.7	26,780	67.1
Black non-hispanic	47,832	23.7	12,302	15.1	11,921	15.9	3,528	8.8
Hispanic	22,055	10.9	7,281	8.9	4,909	6.6	5,510	13.8
Asian/Pacific Islander	8,444	4.2	3,439	4.2	2,883	3.9	1,781	4.5
Native American/Alaskan	1,670	0.8	1,591	1.9	783	1.0	539	1.4
Other	1	0.0	1,539	1.9	194	0.3	164	0.4
Marital status								
Single	90,177	44.7	26,420	32.4	21,321	28.5	26,146	65.5
Married	95,165	47.2	49,880	61.1	45,223	60.4	12,561	31.5
Other ²	15,972	7.9	4,637	5.7	8,334	11.1	1,193	3.0
Education								
High school or less	122,816	60.9	46,257	56.6	44,011	58.8	33,590	84.2
Some college	24,432	12.1	10,013	12.3	7,893	10.5	1,358	3.4
Bachelors	32,420	16.1	15,327	18.8	13,229	17.7	3,704	9.3
Masters	11,559	5.7	4,587	5.6	6,893	9.2	803	2.0
Doctorate	5,309	2.6	1,206	1.5	2,373	3.2	332	0.8
Grade								
Enlisted								
E1-E4	79,435	39.4	21,162	25.9	16,310	21.8	28,278	70.9
E5-E9	84,022	41.7	42,910	52.5	41,940	56.0	8,135	20.4
Officer								
O1-O3 (W1-W3)	16,673	8.3	4,343	5.3	4,443	5.9	746	1.9
O4-O9 (W4-W5)	21,448	10.6	13,244	16.2	12,184	16.3	2,743	6.9

¹ Subgroups may not add up to total due to missing values.

² Includes separated, widowed, divorced.

Table 4. Military occupations¹ of Reserves, by Service, US Armed Forces, 2004

Characteristic	Army		Navy		Air Force		Marine Corps	
	No.	%	No.	%	No.	%	No.	%
Total	201,578	100.0	81,659	100.0	74,882	100.0	39,902	100.0
Enlisted²								
Infantry, seamen, gun crews	11,702	5.8	6,835	8.4	6,135	8.2	11,191	28.0
Electronic equip repair	3,225	1.6	6,612	8.1	2,783	3.7	1,307	3.3
Communications, intelligence	6,201	3.1	4,510	5.5	1,837	2.5	2,850	7.1
Health care	16,350	8.1	5,763	7.1	6,274	8.4	0	0.0
Technical and allied support	6,310	3.1	505	0.6	2,029	2.7	477	1.2
Funct support, admin	42,231	21.0	14,116	17.3	15,428	20.6	4,440	11.1
Electric/mech equip repair	18,002	8.9	12,110	14.8	12,664	16.9	4,866	12.2
Craftworkers	9,709	4.8	9,041	11.1	3,471	4.6	1,164	2.9
Service, supply handlers	30,993	15.4	4,226	5.2	2,982	4.0	5,507	13.8
Non-occupational	18,510	9.2	354	0.4	4,474	6.0	4,608	11.5
Officers²								
General officers and executives	126	0.1	51	0.1	269	0.4	390	1.0
Tactical operations	6,365	3.2	6,786	8.3	5,067	6.8	1,661	4.2
Intelligence	2,072	1.0	1,984	2.4	1,154	1.5	190	0.5
Engineering and maintenance	3,818	1.9	2,040	2.5	1,969	2.6	346	0.9
Scientists, professionals	4,227	2.1	748	0.9	1,414	1.9	175	0.4
Health care	11,768	5.8	3,420	4.2	4,054	5.4	0	0.0
Administrators	3,468	1.7	1,098	1.3	1,123	1.5	252	0.6
Supply, allied specialists	4,918	2.4	1,141	1.4	1,256	1.7	436	1.1
Non-occupational	526	0.3	319	0.4	247	0.3	28	0.1

¹ Based on DoD occupational area codes.² Subgroups may not add up to total due to missing values.

**Table 5. Demographic characteristics, National Guard, by Service,
US Armed Forces, 2004**

Characteristic	Army		Navy ³		Air Force		Marine Corps ³	
	No.	%	No.	%	No.	%	No.	%
Total¹	338,280	100.0	-	-	106,294	100.0	-	-
Gender								
Men	295,022	87.2	-	-	87,539	82.4	-	-
Women	43,258	12.8	-	-	18,755	17.6	-	-
Age (years)								
< 20	29,953	8.9	-	-	3,223	3.0	-	-
20-24	80,900	23.9	-	-	15,944	15.0	-	-
25-29	52,196	15.4	-	-	13,875	13.1	-	-
30-34	46,054	13.6	-	-	15,359	14.4	-	-
35-39	47,443	14.0	-	-	19,082	18.0	-	-
40-44	37,719	11.2	-	-	17,867	16.8	-	-
45-49	20,445	6.0	-	-	9,949	9.4	-	-
50-54	13,067	3.9	-	-	6,821	6.4	-	-
55-59	10,204	3.0	-	-	4,110	3.9	-	-
> 59	297	0.1	-	-	63	0.1	-	-
Race/ethnicity								
White non-hispanic	249,067	73.6	-	-	83,871	78.9	-	-
Black non-hispanic	48,043	14.2	-	-	9,145	8.6	-	-
Hispanic	25,376	7.5	-	-	6,239	5.9	-	-
Asian/Pacific Islander	7,775	2.3	-	-	4,003	3.8	-	-
Native American/Alaskan	2,964	0.9	-	-	1,584	1.5	-	-
Other	3	0.0	-	-	197	0.2	-	-
Marital status								
Single	146,892	43.4	-	-	34,653	32.6	-	-
Married	168,984	50.0	-	-	61,723	58.1	-	-
Other ²	22,404	6.6	-	-	9,915	9.3	-	-
Education								
High school or less	237,610	70.2	-	-	10,909	10.3	-	-
Some college	53,438	15.8	-	-	74,686	70.3	-	-
Bachelors	37,879	11.2	-	-	14,498	13.6	-	-
Masters	6,958	2.1	-	-	3,525	3.3	-	-
Doctorate	2,267	0.7	-	-	1,398	1.3	-	-
Grade								
Enlisted			-	-			-	-
E1-E4	164,742	48.7	-	-	25,943	24.4	-	-
E5-E9	137,108	40.5	-	-	66,761	62.8	-	-
Officer			-	-			-	-
O1-O3 (W1-W3)	22,281	6.6	-	-	4,532	4.3	-	-
O4-O9 (W4-W5)	14,147	4.2	-	-	9,054	8.5	-	-

¹ Subgroups may not add up to total due to missing values.

² Includes separated, widowed, divorced.

³ Not applicable for Navy or Marine Corps.

**Table 6. Military occupations,¹ National Guard, by Service,
US Armed Forces, 2004**

Characteristic	Army		Navy ³		Air Force		Marine Corps ³	
	No.	%	No.	%	No.	%	No.	%
Total	338,280	100.0	-	-	106,294	100.0	-	-
Enlisted²								
Infantry, seamen, gun crews	72,029	21.3	-	-	8,644	8.1	-	-
Electronic equip repair	9,832	2.9	-	-	8,624	8.1	-	-
Communications, intelligence	17,076	5.0	-	-	3,842	3.6	-	-
Health care	11,618	3.4	-	-	4,025	3.8	-	-
Technical and allied support	8,684	2.6	-	-	4,438	4.2	-	-
Funct support, admin	43,389	12.8	-	-	19,798	18.6	-	-
Electric/mech equip repair	41,497	12.3	-	-	25,691	24.2	-	-
Craftworkers	12,544	3.7	-	-	5,787	5.4	-	-
Service, supply handlers	38,622	11.4	-	-	5,827	5.5	-	-
Non-occupational	44,359	13.1	-	-	5,654	5.3	-	-
Officers²								
General officers & executives	188	0.1	-	-	368	0.3	-	-
Tactical operations	16,170	4.8	-	-	4,998	4.7	-	-
Intelligence	1,197	0.4	-	-	411	0.4	-	-
Engineering and maintenance	4,137	1.2	-	-	1,882	1.8	-	-
Scientists, professionals	1,038	0.3	-	-	616	0.6	-	-
Health care	3,032	0.9	-	-	2,053	1.9	-	-
Administrators	2,540	0.8	-	-	1,312	1.2	-	-
Supply, allied specialists	3,675	1.1	-	-	778	0.7	-	-
Non-occupational	3,965	1.2	-	-	354	0.3	-	-

¹ Based on DoD occupational area codes.

² Subgroups may not add up to total due to missing values.

³ Not applicable for Navy or Marine Corps.

Table 7. Sentinel reportable events among all beneficiaries¹ at US Army medical treatment facilities, cumulative numbers,² Jan-Apr, 2004 and 2005

Reporting location	Number of reports all events ³		Food-borne						Vaccine Preventable					
			Campylobacter		Salmonella		Shigella		Hepatitis A		Hepatitis B		Varicella	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
NORTH ATLANTIC														
Washington, DC Area	97	203	.	1	1	1	.	1	.	.	.	.	3	1
Aberdeen, MD	16	48	.	.	.	.	.	1	.	.	.	.	.	.
FT Belvoir, VA	83	173	1	2	1	3	.	.	.	.	.	.	1	.
FT Bragg, NC	577	609	1	2	6	1	.	.	.	.	.	.	.	.
FT Drum, NY	32	75	.	.	.	.	.	.	.	.	.	.	.	.
FT Eustis, VA	88	126	.	.	.	1	.	.	.	.	.	.	.	.
FT Knox, KY	68	98	.	.	1	2	.	.	.	.	.	.	.	.
FT Lee, VA	64	65	.	.	.	.	.	.	.	.	.	.	.	.
FT Meade, MD	54	32	.	.	.	.	.	.	.	.	.	.	.	1
West Point, NY	19	24	1	.	.	.	.	.	.	.	.	.	.	.
GREAT PLAINS														
FT Sam Houston, TX	92	131	.	.	2	2	.	1	.	.	.	1	1	.
FT Bliss, TX	126	194	1	1	2	1	2	3	.	.	.	.	.	.
FT Carson, CO	157	323	1	2	1	.	1	.	.	.	.	.	.	.
FT Hood, TX	292	661	4	1	2	.	13	2	.	.	.	.	.	.
FT Huachuca, AZ	42	26	.	.	.	.	.	.	.	.	.	.	.	.
FT Leavenworth, KS	13	13	.	.	.	1	.	.	.	.	.	.	.	.
FT Leonard Wood, MO	94	140	.	.	.	.	.	.	.	.	.	.	.	1
FT Polk, LA	50	86	.	.	2	.	.	.	.	.	.	.	.	.
FT Riley, KS	73	61	.	.	.	.	.	.	1	.	.	.	.	.
FT Sill, OK	55	56	.	.	1	.	1	1	.	.	.	.	.	.
SOUTHEAST														
FT Gordon, GA	25	99	1	.	1	.	.	.	.	.	.	1	.	.
FT Benning, GA	136	86	.	.	3	1	.	2	.	.	.	.	.	.
FT Campbell, KY	222	437	1	.	3	2	1	2	.	.	.	.	2	1
FT Jackson, SC	97	43	.	.	.	.	.	.	.	2	.	.	.	.
FT Rucker, AL	24	11	.	.	.	.	.	.	.	.	.	.	.	.
FT Stewart, GA	143	198	1	.	.	.	2	.	.	4	.	14	.	.
WESTERN														
FT Lewis, WA	187	225	1	2	1	1	2	.	.	.	.	.	.	.
FT Irwin, CA	30	24	.	.	.	.	.	.	.	.	.	.	.	.
FT Wainwright, AK	96	61	.	.	1	.	.	.	1	.	1	.	.	.
OTHER LOCATIONS														
Hawaii	335	275	3	7	3	5	.	.	.	.	1	.	2	.
Europe	446	528	5	7	3	5	.	.	.	2	.	2	2	2
Korea	127	142	1	.	.	.	.	.	.	.	.	.	1	.
Total	3,960	5,273	22	25	34	26	22	13	2	8	2	18	12	6

¹ Includes service members, dependents, and retirees

² Events reported by May 7, 2005

³ Total of all reports of events specified by Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting vary by facility

Source: Army Reportable Medical Events System

(Cont'd) Sentinel reportable events among all beneficiaries¹ at US Army medical treatment facilities, cumulative numbers,² Jan-Apr, 2004 and 2005

Reporting location	Arthropod-borne						Sexually Transmitted								Environmental			
	Leishmaniasis		Lyme disease		Malaria		Chlamydia		Gonorrhea		Syphilis ³		Urethritis ⁴		Cold		Heat	
	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005	2004	2005
NORTH ATLANTIC																		
Washington, DC Area	11	.	.	.	.	.	44	63	6	10	1	4	.	.	29	1	.	.
Aberdeen, MD	.	.	.	.	.	.	15	14	.	2	.	.	.	.	.	.	.	.
FT Belvoir, VA	.	.	.	.	.	.	70	71	7	19	2	.	.	.	.	.	.	.
FT Bragg, NC	.	.	.	.	4	.	415	452	95	86	1	2	40	44	3	1	7	4
FT Drum, NY	1	.	.	.	4	.	23	25	1	3	.	.	.	.	1	1	.	.
FT Eustis, VA	.	.	1	.	.	.	68	63	8	14	.	.	.	.	.	2	.	.
FT Knox, KY	.	.	.	.	.	.	61	55	3	4	.	.	.	.	.	1	.	.
FT Lee, VA	.	.	.	.	.	.	52	53	12	11	.	.	.	.	.	1	.	.
FT Meade, MD	.	.	.	.	.	.	43	29	9	2	.	.	.	.	.	.	.	.
West Point, NY	.	.	1	3	.	.	13	15	.	.	.	.	.	.	1	1	3	.
GREAT PLAINS																		
FT Sam Houston, TX	.	.	.	.	.	.	68	70	9	22	1	1	.	.	.	.	.	.
FT Bliss, TX	7	4	.	.	.	.	87	65	18	6	1	1	.	.	.	.	.	.
FT Carson, CO	.	.	.	.	.	.	132	182	9	29	1	.	11	11	.	1	.	.
FT Hood, TX	3	.	.	.	.	.	181	338	45	149	.	.	38	99	.	.	.	.
FT Huachuca, AZ	.	.	.	.	.	.	39	17	3	7	.	.	.	.	.	.	.	1
FT Leavenworth, KS	.	.	.	.	.	.	9	11	4	.	.	.	.	.	.	1	.	.
FT Leonard Wood, MO	.	.	.	.	1	.	69	65	21	18	.	.	.	1	1	4	2	1
FT Polk, LA	.	1	.	.	.	.	38	61	9	18	1	1	.	.	.	.	.	.
FT Riley, KS	.	.	.	.	.	.	54	17	10	8	.	.	.	.	5	5	1	.
FT Sill, OK	.	.	.	.	.	.	46	21	2	10	1	.	.	.	2	.	.	.
SOUTHEAST																		
FT Gordon, GA	.	.	.	.	.	.	18	61	2	4	.	1	.	.	.	.	.	.
FT Benning, GA	.	2	.	.	2	1	86	56	42	20	.	.	.	.	.	1	.	2
FT Campbell, KY	21	.	.	.	.	.	164	302	28	64	.	.	.	.	.	1	1	1
FT Jackson, SC	.	.	.	.	.	.	81	31	8	8	.	.	.	.	5	.	.	.
FT Rucker, AL	.	.	.	.	.	.	21	5	2	6	.	.	.	.	.	.	.	.
FT Stewart, GA	.	.	.	.	.	.	90	114	44	40	.	.	4	6	.	.	.	1
WESTERN																		
FT Lewis, WA	.	8	1	.	.	3	127	150	16	26	.	.	30	28	1	.	.	.
FT Irwin, CA	.	.	.	.	.	.	25	17	5	7	.	.	.	.	.	.	.	.
FT Wainwright, AK	1	.	.	.	.	1	34	40	5	4	.	.	.	.	53	13	.	.
OTHER LOCATIONS																		
Hawaii	.	.	.	.	.	2	237	167	66	26	.	.	.	.	.	.	4	.
Europe	1	.	.	2	2	1	320	301	74	77	1	1	.	1	1	5	.	.
Korea	1	.	.	.	.	.	102	118	17	18	1	1	.	.	4	3	.	1
Total	46	15	3	5	13	8	2,832	3,049	580	718	11	12	123	190	106	42	18	11

¹ Includes Active Component service members, dependents, and retirees

² Events reported by May 7, 2005

³ Primary and secondary

⁴ Urethritis, non-gonococcal (NGU)

Note: Completeness and timeliness of reporting vary by facility

Source: Army Reportable Medical Events System

Table 8. Sentinel reportable events among all beneficiaries¹ at US Army medical treatment facilities, cumulative numbers,² calendar years 2003 and 2004

Reporting location	Number of reports all events ³		Food-borne						Vaccine Preventable					
			Campylo- bacter		Salmonella		Shigella		Hepatitis A		Hepatitis B		Varicella	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
NORTH ATLANTIC														
Washington, DC Area	683	319	.	3	3	2	3	4	.	.	.	3	2	4
Aberdeen, MD	107	68	.	.	1	1	.	.	.	.	.	.	.	1
FT Belvoir, VA	300	291	10	10	11	6	4	2	.	2	.	.	.	1
FT Bragg, NC	1,927	2,003	8	11	30	48	20	1	.	.	.	.	2	.
FT Drum, NY	201	198	.	.	.	1	.	.	.	.	.	.	2	.
FT Eustis, VA	508	238	.	1	1	3	.	.	.	.	.	.	2	.
FT Knox, KY	258	233	3	5	5	2	.	.	.	.	.	1	1	.
FT Lee, VA	218	195	.	.	2	.	.	.	.	.	.	.	.	.
FT Meade, MD	119	189	.	1	.	.	1	.	.	.	.	.	.	.
West Point, NY	85	79	2	1	2	1	.	.	1	.	1	1	.	.
GREAT PLAINS														
FT Sam Houston, TX	244	357	.	.	6	3	.	1	.	.	1	.	.	2
FT Bliss, TX	444	405	2	1	3	10	1	13	.	1	2	4	1	1
FT Carson, CO	719	693	15	2	3	5	2	1	4	.	.	1	1	.
FT Hood, TX	2,006	1,674	9	8	28	15	109	59	1	.	1	1	.	.
FT Huachuca, AZ	80	112	.	.	.	.	.	.	.	.	.	.	.	.
FT Leavenworth, KS	48	43	2	2	1	1	1	.	.	.	.	.	.	.
FT Leonard Wood, MO	232	255	8	1	1	3	.	.	.	.	1	1	4	2
FT Polk, LA	225	218	1	2	3	10	1	.	.	.	3	2	.	.
FT Riley, KS	252	272	4	1	1	1	.	.	1	1	2	.	.	.
FT Sill, OK	251	204	.	.	.	3	1	5	.	.	.	.	.	.
SOUTHEAST														
FT Gordon, GA	329	243	.	1	3	6	.	.	.	.	2	3	.	.
FT Benning, GA	495	471	1	.	9	16	8	3	.	.	.	.	.	1
FT Campbell, KY	520	886	5	7	4	5	1	8	.	.	.	.	.	4
FT Jackson, SC	250	340	.	.	1	.	.	.	1	.	.	.	.	3
FT Rucker, AL	86	75	.	.	6	3	7	.	3	1	2	.	.	1
FT Stewart, GA	351	669	.	2	16	12	14	4	.	3	.	3	1	.
WESTERN														
FT Lewis, WA	733	701	3	7	7	5	3	3	2	.	1	1	.	1
FT Irwin, CA	61	72	.	.	.	.	.	.	.	.	.	.	.	.
FT Wainwright, AK	203	235	2	1	1	2	.	.	.	1	.	1	.	.
OTHER LOCATIONS														
Hawaii	1,082	867	24	20	11	30	4	.	.	1	2	14	2	2
Europe	1,573	1,495	19	22	19	28	1	1	10	7	1	1	3	4
Korea	633	545	.	1	2	1	.	.	1	.	1	2	6	4
Total	15,223	14,645	118	110	180	223	181	105	24	17	20	39	27	31

¹ Includes service members, dependents, and retirees

² Events reported as of April 7, 2005

³ Total of all reports of events specified by Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting vary by facility

Source: Army Reportable Medical Events System

(Cont'd) Sentinel reportable events among all beneficiaries¹ at US Army medical treatment facilities, cumulative numbers², calendar years 2003 and 2004

Reporting location	Arthropod-borne						Sexually Transmitted								Environmental			
	Leishmaniasis		Lyme disease		Malaria		Chlamydia		Gonorrhea		Syphilis ³		Urethritis ⁴		Cold		Heat	
	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004	2003	2004
NORTH ATLANTIC																		
Washington, DC Area	412	81	2	4	2	.	172	132	25	21	3	7	.	.	2	29	.	11
Aberdeen, MD	.	.	2	.	.	.	41	61	12	4	.	.	.	.	9	.	.	.
FT Belvoir, VA	.	.	2	1	1	2	212	229	44	26	.	3	.	.	.	.	1	2
FT Bragg, NC	.	2	1	.	8	10	1,312	1,362	267	292	6	20	112	137	6	3	80	111
FT Drum, NY	.	1	.	.	.	4	138	117	27	7	1	.	.	.	4	1	.	.
FT Eustis, VA	.	.	.	2	.	.	188	191	44	22	1	1	.	.	.	.	.	3
FT Knox, KY	.	1	.	.	.	1	211	178	32	18	.	.	.	.	.	.	1	16
FT Lee, VA	.	.	.	1	.	.	142	160	27	30	.	.	.	.	.	.	.	1
FT Meade, MD	.	.	.	3	.	.	97	157	20	24	.	.	.	.	.	.	.	.
West Point, NY	.	.	37	25	.	.	25	42	3	1	.	.	.	.	1	1	8	4
GREAT PLAINS																		
FT Sam Houston, TX	1	.	.	1	.	2	181	229	34	51	2	1	.	.	.	.	.	22
FT Bliss, TX	.	11	.	3	.	.	281	264	59	63	2	1	.	.	.	.	1	3
FT Carson, CO	1	385	542	40	62	1	1	41	63	3	.	1	.
FT Hood, TX	.	18	.	1	3	3	1,017	932	302	288	5	3	224	276	5	.	11	49
FT Huachuca, AZ	1	.	74	106	5	6	.	.	.	.	.	.	.	.
FT Leavenworth, KS	1	.	38	27	3	9	.	.	.	.	.	1	.	.
FT Leonard Wood, MO	1	184	185	22	48	1	.	.	.	2	1	3	8
FT Polk, LA	1	1	162	162	45	36	.	2	.	.	.	.	9	2
FT Riley, KS	1	1	.	1	.	1	197	183	10	43	.	.	.	.	.	5	4	22
FT Sill, OK	.	.	.	1	.	.	148	133	21	22	1	1	32	.	.	2	4	32
SOUTHEAST																		
FT Gordon, GA	2	1	280	195	24	26	5	2	.	.	.	.	2	3
FT Benning, GA	29	4	266	246	117	113	.	.	.	.	.	.	57	80
FT Campbell, KY	1	27	1	.	2	3	385	613	96	114	1	1	.	.	2	.	9	88
FT Jackson, SC	1	184	193	34	34	.	1	.	.	5	6	22	61
FT Rucker, AL	46	52	13	12	.	.	1	.	.	.	4	4
FT Stewart, GA	2	.	174	368	85	155	.	3	35	43	.	.	14	46
WESTERN																		
FT Lewis, WA	.	116	.	1	2	1	399	415	76	57	.	.	88	74	1	1	2	2
FT Irwin, CA	47	60	13	10	.	.	.	.	.	.	.	2
FT Wainwright, AK	.	1	.	.	1	3	123	131	26	12	.	.	.	.	35	59	.	.
OTHER LOCATIONS																		
Hawaii	2	2	745	587	132	116	1	.	.	.	.	.	21	16
Europe	5	4	6	17	9	7	1,145	1,086	272	238	2	2	1	.	4	2	33	7
Korea	.	1	.	.	19	11	490	435	74	58	3	3	9	1	5	6	12	18
Total	420	264	51	61	85	59	9,489	9,773	2,004	2,018	35	52	543	594	84	117	299	613

¹ Includes service members, dependents, and retirees

² Events reported by April 7, 2005.

³ Primary and secondary.

⁴ Urethritis, non-gonococcal (NGU).

Note: Completeness and timeliness of reporting vary by facility.

Source: Army Reportable Medical Events System.

**Table 9. Reportable events,¹ US Army medical treatment facilities,²
cumulative events for all beneficiaries, January-December 2004**

Diagnosis ³	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Diagnosis ³	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec
	2004	2004	2004	2004		2004	2004	2004	2004
All reportable events	3,395	3,700	3,968	3,504	Listeriosis	.	.	.	.
Amebiasis	.	.	.	.	Lyme disease	5	23	26	6
Anthrax	.	.	.	.	Malaria, falciparum	2	5	3	1
Biol. warfare agent exposure	1	.	.	.	Malaria, malariae	.	.	.	.
Botulism	.	.	.	1	Malaria, ovale	.	1	.	.
Brucellosis	.	.	1	.	Malaria, unspecified	1	6	10	1
Campylobacteriosis	22	36	31	21	Malaria, vivax	6	5	11	5
Carbon monoxide poisoning	.	.	.	.	Measles	2	2	.	.
Chemical agent exposure	.	.	.	.	Meningococcal meningitis	1	.	1	.
Chlamydia	2,375	2,520	2,554	2,300	Meningococcal septicemia	1	.	.	.
Cholera	.	.	.	.	Mumps	.	.	.	.
Coccidioidomycosis	1	.	1	1	Pertussis	2	2	4	42
Cold weather, frostbite	89	4	.	6	Plague	.	.	.	.
Cold weather, hypothermia	.	.	.	.	Poliomyelitis	.	.	.	.
Cold weather, immersion type	4	2	.	.	Q fever	.	.	.	1
Cold weather, unspecified	11	.	.	1	Rabies, human	.	.	.	.
Cryptosporidiosis	.	.	.	.	Relapsing fever	.	.	.	.
Cyclospora	.	.	.	.	Rheumatic fever, acute	.	.	.	.
Dengue fever	.	.	1	1	Rift Valley fever	.	.	.	.
Diphtheria	.	.	.	.	Rocky Mountain spotted fever	.	4	5	1
<i>Escherichia coli</i> O157:H7	1	6	2	2	Rubella	.	.	.	.
Ehrlichiosis	.	.	.	.	Salmonellosis	30	51	97	43
Encephalitis	.	.	.	.	Schistosomiasis	.	.	1	.
Filariasis	1	.	.	.	Shigellosis	14	38	26	26
Giardiasis	14	18	12	7	Smallpox	.	.	.	.
Gonorrhea	494	503	508	507	<i>Streptococcus</i> , group A, inv.	5	1	3	3
<i>H. influenzae</i> , invasive	.	.	1	2	Syphilis, congenital	.	.	1	.
Hantavirus infection	.	.	.	.	Syphilis, latent	7	6	8	8
Heat exhaustion	15	157	240	9	Syphilis, primary/secondary	9	13	8	22
Heat stroke	6	58	113	13	Syphilis, tertiary	1	1	1	2
Hemorrhagic fever	.	.	.	.	Tetanus	.	1	.	1
Hepatitis A	3	3	4	6	Toxic shock syndrome	.	.	.	.
Hepatitis B	3	6	10	8	Trichinosis	.	6	.	2
Hepatitis C	1	9	13	18	Trypanosomiasis	.	.	.	.
Influenza	74	31	9	146	Tuberculosis, pulmonary	2	2	8	3
Lead poisoning	.	.	.	2	Tularemia	.	.	.	.
Legionellosis	2	1	.	2	Typhoid fever	.	.	.	.
Leishmaniasis, cutaneous	61	19	51	120	Typhus fever	.	.	.	.
Leishmaniasis, mucocutaneous	.	.	.	.	Urethritis, non-gonococcal	111	145	188	149
Leishmaniasis, unspecified	.	.	.	.	Vaccine, adverse event	8	2	7	12
Leishmaniasis, visceral	.	.	1	.	Varicella, active duty only	8	12	4	2
Leprosy	1	.	.	.	West Nile virus	.	.	4	.
Leptospirosis	1	1	.	1	Yellow fever	.	.	.	.

¹ Events reported by April 7, 2005

² Main and satellite clinics

³ Tri-Service Reportable Events, May 2004

Note: Completeness and timeliness of reporting varies by facility

Source: Army Reportable Medical Events System

**Table 10. Reportable events,¹ US Army medical treatment facilities,²
cumulative events for all beneficiaries, calendar years 2003 and 2004**

Diagnosis ³	2003		2004		Diagnosis ³	2003		2004	
	AD ⁴	Other	AD ⁴	Other		AD ⁴	Other	AD ⁴	Other
All reportable events	8,529	7,068	8,701	5,866	Listeriosis	1	3	.	.
Amebiasis	.	2	.	.	Lyme disease	11	44	20	40
Anthrax	.	.	.	.	Malaria, falciparum	4	2	8	3
Biol. warfare agent exposure	.	.	1	.	Malaria, malariae	.	.	.	.
Botulism	.	1	.	1	Malaria, ovale	.	1	1	.
Brucellosis	1	.	1	.	Malaria, unspecified	21	6	16	2
Campylobacteriosis	36	82	33	77	Malaria, vivax	49	3	26	1
Carbon monoxide poisoning	.	5	.	.	Measles	.	.	.	4
Chemical agent exposure	.	.	.	.	Meningococcal meningitis	2	5	1	1
Chlamydia	5,439	4,097	5,732	4,017	Meningococcal septicemia	.	.	.	1
Cholera	.	.	.	.	Mumps	1	2	.	.
Coccidioidomycosis	1	5	2	1	Pertussis	.	17	20	30
Cold weather, frostbite	39	15	63	36	Plague	.	.	.	.
Cold weather, hypothermia	3	1	.	.	Poliomyelitis	.	.	.	.
Cold weather, immersion type	12	.	6	.	Q fever	3	.	1	.
Cold weather, unspecified	9	5	5	7	Rabies, human	.	.	.	.
Cryptosporidiosis	.	.	.	.	Relapsing fever	.	.	.	.
Cyclospora	.	.	.	.	Rheumatic fever, acute	.	.	.	.
Dengue fever	.	.	1	1	Rift Valley fever	.	.	.	.
Diphtheria	.	.	.	.	Rocky Mountain spotted fever	.	1	6	4
<i>Escherichia coli</i> O157:H7	.	5	.	11	Rubella	.	.	.	.
Ehrlichiosis	.	.	.	.	Salmonellosis	31	150	30	191
Encephalitis	.	.	.	.	Schistosomiasis	.	.	.	1
Filariasis	.	.	1	.	Shigellosis	35	146	15	89
Giardiasis	18	44	17	34	Smallpox	.	.	.	.
Gonorrhea	1,287	721	1,300	712	<i>Streptococcus</i> , group A, inv.	4	14	2	10
<i>H. influenzae</i> , invasive	2	4	.	3	Syphilis, congenital	1	2	.	1
Hantavirus infection	2	1	.	.	Syphilis, latent	7	7	10	19
Heat exhaustion	126	57	285	136	Syphilis, primary/secondary	18	17	35	17
Heat stroke	88	33	167	23	Syphilis, tertiary	4	5	.	5
Hemorrhagic fever	1	1	.	.	Tetanus	.	.	.	2
Hepatitis A	6	18	6	10	Toxic shock syndrome	.	.	.	.
Hepatitis B	10	20	15	12	Trichinosis	.	.	1	7
Hepatitis C	6	7	23	18	Trypanosomiasis	.	.	.	.
Influenza	185	1,248	88	172	Tuberculosis, pulmonary	3	13	5	10
Lead poisoning	.	.	.	2	Tularemia	1	.	.	.
Legionellosis	.	6	.	5	Typhoid fever	.	1	.	.
Leishmaniasis, cutaneous	513	94	205	46	Typhus fever	.	.	.	.
Leishmaniasis, mucocutaneous	.	.	.	.	Urethritis, non-gonococcal	442	101	511	82
Leishmaniasis, unspecified	.	.	.	.	Vaccine, adverse event	75	29	18	11
Leishmaniasis, visceral	1	.	1	.	Varicella, active duty only	23	4	20	6
Leprosy	.	.	1	.	West Nile virus	3	23	1	3
Leptospirosis	5	.	1	2	Yellow fever	.	.	.	.

¹ Events reported by April 7, 2005

² Main and satellite clinics

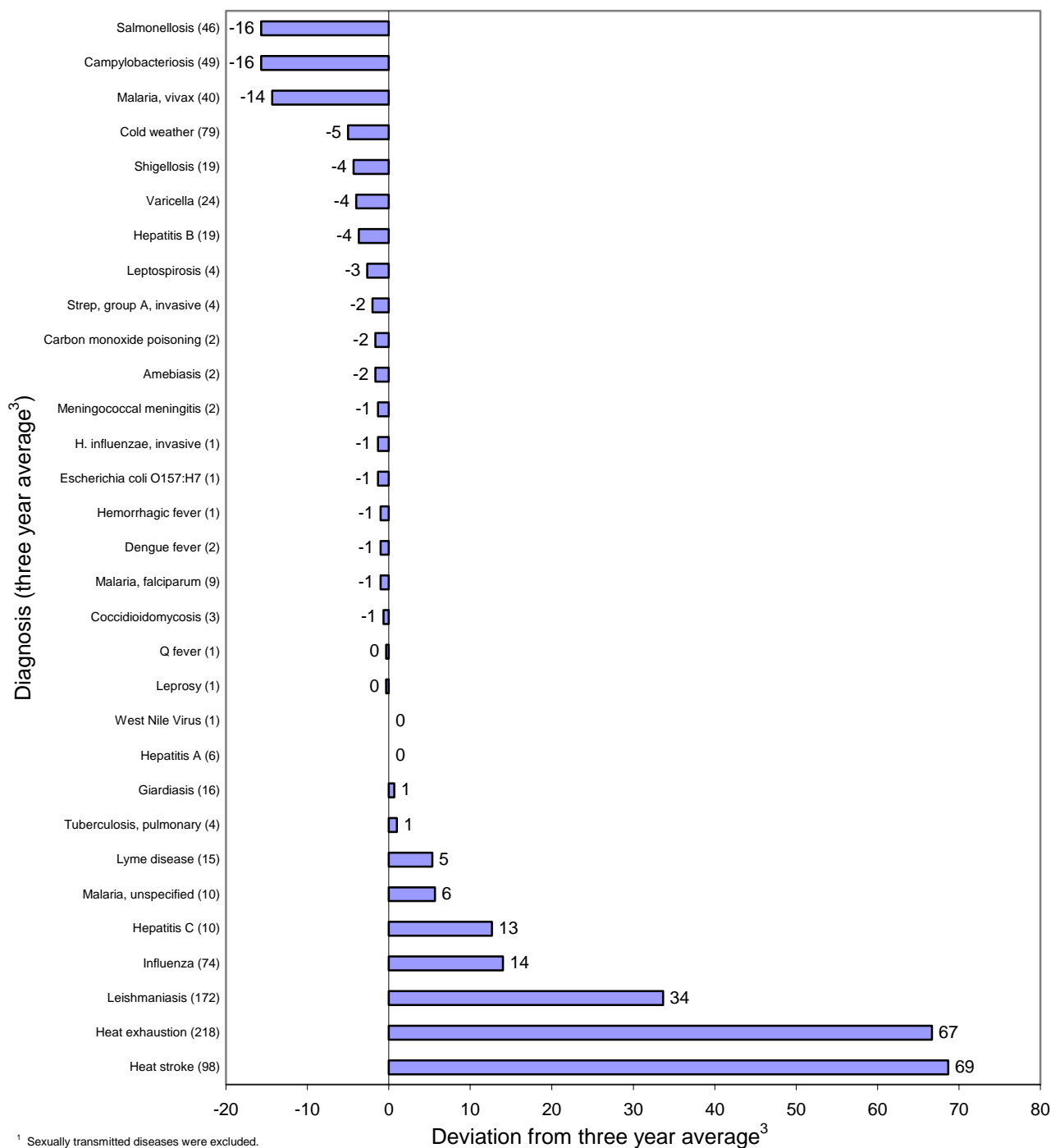
³ Tri-Service Reportable Events, May 2004

⁴ Active duty personnel

Note: Completeness and timeliness of reporting varies by facility

Source: Army Reportable Medical Events System

Figure 1. Number of reportable events¹ among active component members during 2004² compared to the three year average³ of 2001-2003, Army medical treatment facilities.



¹ Sexually transmitted diseases were excluded.

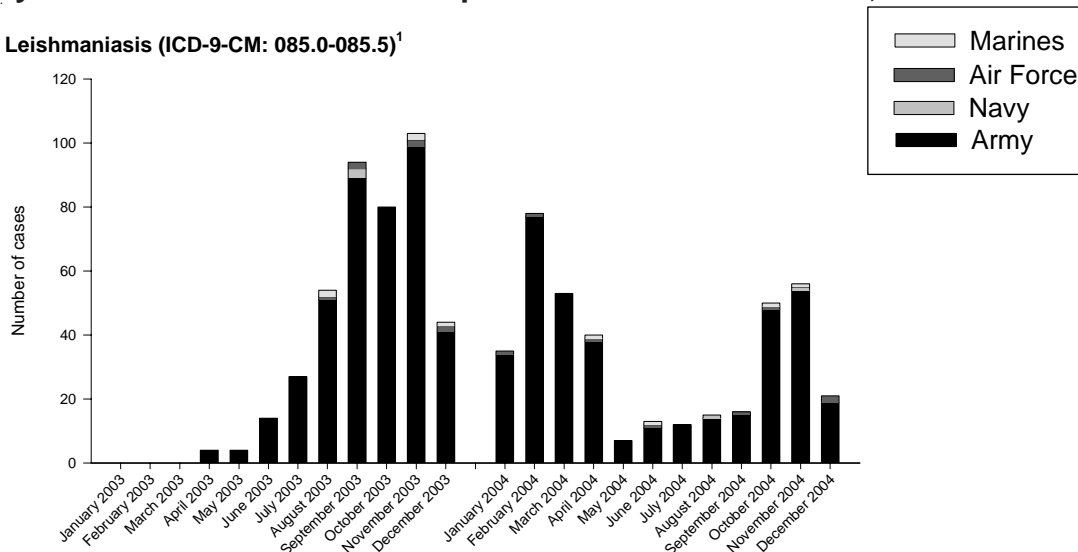
² Reported by April 7, 2005.

³ Comparisons given for diseases that had a total of three year incidence of at least 3 cases. All averages are rounded to the nearest integer.

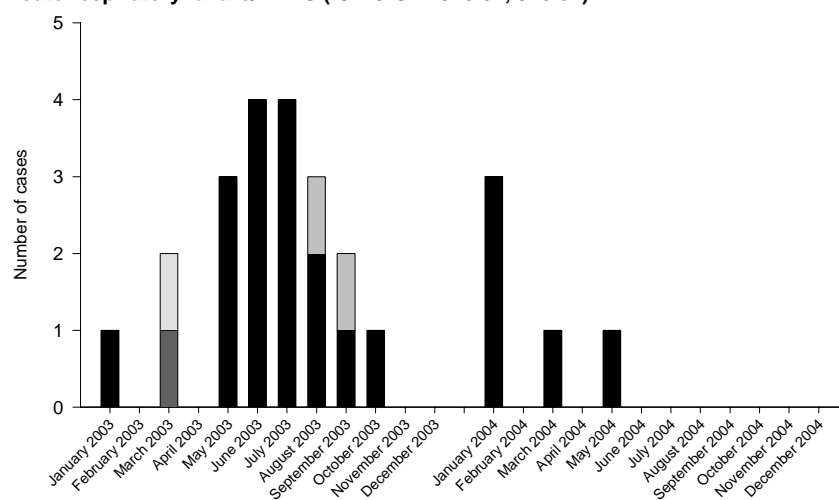
Source: Army Reportable Medical Events System

Deployment-related conditions of special surveillance interest, US Armed Forces,

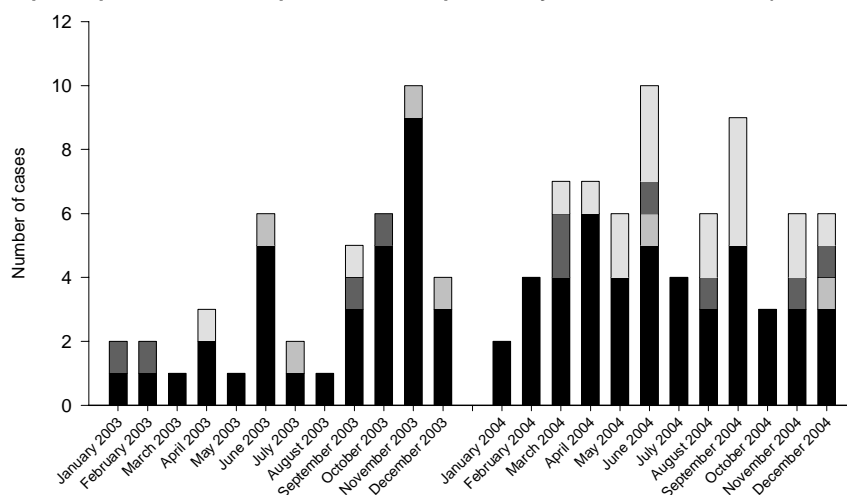
Leishmaniasis (ICD-9-CM: 085.0-085.5)¹



Acute respiratory failure/ARDS (ICD-9-CM: 518.81, 518.82)²



Deep vein phlebitis/thrombophlebitis and/or pulmonary embolism/infarction (ICD-9-CM: 451.1, 451.81, 415.1)³



Footnotes:

1. Indicator diagnosis (one per individual) during a hospitalization, ambulatory visit, and/or from a notifiable medical event during/after service in OEF/OIF.
2. Indicator diagnosis (one per individual) during a hospitalization while deployed to/within 30 days of returning from OEF/OIF.
3. Indicator diagnosis (one per individual) during a hospitalization or ambulatory visit while deployed to/within 30 days of returning from OEF/OIF.

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